

VOLUME 6

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

Before The Honorable YVONNE GONZALEZ ROGERS, Judge

EPIC GAMES, INC.,)	
)	
Plaintiff,)	NO. C-20-5640 YGR
)	
vs.)	Monday, May 10, 2021
)	
APPLE, INC.,)	Oakland, California
)	
Defendant.)	BENCH TRIAL
)	
APPLE, INC.,)	
)	
Counterclaimant,)	
)	
vs.)	
)	
EPIC GAMES, Inc.,)	
)	
Counter-Defendant.)	
)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

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(Appearances continued.)

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TRANSCRIPT PRODUCED BY COMPUTER-AIDED TRANSCRIPTION

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1 MONDAY, MAY 10, 2021

8:00 a.m.

2 P R O C E E D I N G S

3 **THE CLERK:** Calling CV 20-5640, Epic Games, Inc., vs.

4 Apple, Inc.

5 Counsel, please state your appearances.

6 **MS. FORREST:** Good morning, Your Honor. Katherine

7 Forrest for Epic.

8 **THE COURT:** Good morning.

9 **MS. MOSKOWITZ:** Good morning, Your Honor. Lauren

10 Moskowitz also for Epic.

11 **THE COURT:** Good morning.

12 Mr. Sweeney, good morning.

13 **MR. SWEENEY:** Good morning.

14 **MS. MOSKOWITZ:** Jin Niu is also here.

15 **MR. NIU:** Good morning, Your Honor.

16 **THE COURT:** Mr. Niu, good morning.

17 Mr. Rudd, good morning.

18 **MR. DOREN:** Good morning, Your Honor. Richard Doren

19 for Apple.

20 **MS. DUNN:** Good morning, Your Honor. Karen Dunn for

21 Apple.

22 **THE COURT:** Good morning.

23 **MS. BRASS:** Good morning, Your Honor. Rachel Brass

24 for Apple.

25 **THE COURT:** Good morning.

1 **MS. DUNN:** Your Honor, I wanted to introduce you this
2 morning to Ms.--

3 **THE COURT:** Ms. Dunn, in the mic.

4 **THE CLERK:** The mic is on on the table.

5 **MS. DUNN:** Your Honor, I wanted to introduce you to
6 Ms. Arpine Lawyer, who is our young lawyer who will be
7 handling exhibits this morning. She is with us at the table.
8 One thing I wanted to mention to Your Honor is while
9 Ms. Lawyer is admitted to the bar in California, she is not a
10 yet admitted in this district and has submitted her paperwork
11 this morning, and we have copies for the Court.

12 **THE COURT:** Okay. And how do I your spell your name
13 again, please?

14 **MS. LAWYER:** A-R-P-I-N-E --

15 **THE COURT:** Go to a mic.

16 **MS. LAWYER:** A-R-P-I-N-E.

17 **THE COURT:** Okay. And --

18 **MS. LAWYER:** Lawyer, L-A-W-Y-E-R.

19 **THE COURT:** That's your name?

20 **MS. LAWYER:** Yes, Your Honor.

21 **THE COURT:** Okay. Well --

22 **MR. KLEINBRODT:** Your Honor, good morning. Julian
23 Kleinbrodt, also for Apple.

24 **THE COURT:** Okay. And I don't have you on my list
25 either, sir. Why don't we get your spelling as well.

1 **MR. KLEINBRODT:** Sure, Your Honor. Julian,
2 J-U-L-I-A-N, Kleinbrodt, K-L-E-I-N-B-R-O-D-T.

3 **MS. DUNN:** We are also joined by Heather Grenier,
4 head of civil litigation at Apple.

5 **THE COURT:** Good morning.
6 Do we still have Mr. Spalding back there? Okay.
7 And then in the gallery we have Brittnay DeJong.

8 **MS. DEJONG:** Good morning, Your Honor.

9 **THE COURT:** And then we have Amy Miller from MLex.

10 **MS. MILLER:** Good morning.

11 **THE COURT:** And Dorothy Atkins from *Law360*.
12 Good morning, to everyone. I hope you were able to enjoy
13 a little bit of the fresh air over the weekend. We were busy
14 ourselves here.

15 I did issue some of the orders relating to your request to
16 seal, etc., over the weekend. Why don't we go ahead and just
17 start so I can see if there is anything other than exhibits to
18 do this morning.

19 Ms. Forrest, do you have anything on your list of things
20 to do?

21 **MS. FORREST:** Yes, Your Honor. I have just two
22 things, and then actually a third thing that is really just to
23 let the Court know about an agreement the parties have
24 reached.

25 One is that we are doing our mightiest to turn around the

1 findings of fact as quickly as we can with the final
2 transcripts, and I think --

3 **THE COURT:** Let me just interpose because I know that
4 there were issues, I think, in part because we are in a
5 situation, given COVID, where people who used to do scoping
6 and be in the background are shifting how they are doing
7 things.

8 So what if we just say, you know, the second business day
9 after you receive the transcript, if you can get it to me in
10 that way. I know my court reporters are working very hard to
11 get this to you, and they are just struggling. So if I do it
12 teed off when you get it, that would be helpful, and it -- you
13 know, it's really to just keep us on track. I know it's extra
14 work, but I really do think that it's important, and I'm going
15 to start reading them next. I was focused on the expert
16 reports. But I want to have those things while it's all fresh
17 in our minds. That's the goal.

18 So I didn't -- I did mean to cut you off, actually.

19 **MS. FORREST:** That was very helpful because it
20 precisely solves the issue, Your Honor. Thank you.

21 **THE COURT:** Great.

22 What else?

23 **MS. FORREST:** The other issue is I just wanted to go
24 back to something we spoke about pretrial was whether or not
25 the parties would have a closing, and we said well, we'll deal

1 with that during the trial.

2 I wanted to suggest to Your Honor that from our
3 perspective, we would like to save out of our time an hour,
4 potentially, to sum up. We think it would be useful to pull
5 together what will then be a very substantial evidentiary
6 record and to do that in a way that is effective and
7 efficient, but we wanted to alert you to that.

8 We've spoken to Apple about that, and I don't know that we
9 have agreement on it, but I wanted to let you know that from
10 our perspective, we would like to save an hour and to alert
11 you to that now.

12 **THE COURT:** Okay.

13 **MS. DUNN:** Your Honor, I think from our perspective,
14 we have budgeted our evidence against the 45 hours. Our
15 understanding of what the Court had said was if you wanted
16 closing, you may ask for it, and so our view is we don't think
17 at this point it is necessary, but of course if the Court
18 thinks it's necessary, obviously we would have that.

19 **THE COURT:** All right. Well, let me think about it,
20 and I'll get back to you.

21 **MS. DUNN:** Thank you, Your Honor.

22 **MS. FORREST:** The one last thing is in the nature of
23 an agreement the parties had reached, I believe, on Friday
24 which was that the documents will not go into the box until
25 5:00 as opposed to sort of immediately after being received

1 because sometimes there are some confidentiality things that
2 need to get dealt with. They will go into the box on a daily
3 basis, but not until 5:00.

4 **THE COURT:** I think my -- that's what my order said,
5 so, frankly, I was surprised when I learned that things had
6 gone into the box and there were things that had gone into box
7 that weren't supposed to go into the box, and the whole point
8 of my order was to give people the ability to resolve those
9 things before they did go into the box. So that's fine with
10 me.

11 **MS. FORREST:** Thank you.

12 **MS. DUNN:** Thank you, Your Honor.

13 **THE COURT:** Okay. Over the weekend, I thought -- and
14 perhaps it didn't make it in, but I thought I -- we had sent
15 maybe an email or it was in one of the orders asking about the
16 evidence with respect to the experts because as I looked at
17 those reports, there are all sorts of exhibits to which the
18 experts relied that I have never seen, that is, I have never
19 seen in evidence yet.

20 So what is it that you are all doing and/or agreeing with
21 respect to all of those documents that have been identified
22 but are not yet in the record?

23 **MS. FORREST:** Your Honor, from the perspective of
24 Epic, there is a substantial workstream that is currently in
25 process just outside here where there have been lots of

1 negotiations with Apple about some of these documents. Some
2 of them were intended to come in later in the case through
3 witnesses yet to be called so they are subject to connection
4 and things of that nature.

5 We are working all of that out, and it will be, I believe,
6 quite clear to Your Honor when we're ready to proceed in that
7 manner. So we are very mindful of the Court's order in this
8 regard.

9 **THE COURT:** Ms. Brass.

10 **MS. BRASS:** Your Honor, I agree with that. I've been
11 handling those negotiations for Apple and just came in to
12 answer any questions but then will resume them as soon as we
13 are done with this session.

14 **THE COURT:** The other thing, just a procedural issue,
15 I think with Ms. Forrest and Mr. Doren, people now know your
16 voices, most likely, but for everybody else who is just
17 listening in, it is helpful when you go to a mic to introduce
18 yourself. And I would just suggest for examinations going
19 forward, sometimes lawyers introduce themselves, sometimes
20 they don't. But for the attorneys, if you will make sure to
21 introduce yourself when you get to the mic, that just helps
22 the press and everybody else listening. Okay?

23 **MS. FORREST:** Yes, Your Honor.

24 **MS. BRASS:** Yes, Your Honor.

25 **THE COURT:** All right. So I think there are a few

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1 things that we will try to get to in the evenings. I now have
2 a motion with respect to the Samsung request to seal. I have
3 an outstanding evidentiary issue which I will deal with, and
4 then I believe I just have the objections on two experts
5 pending.

6 Anything else that you're waiting on from me? Those are
7 the three things that I think I have in front of me.

8 **MS. DUNN:** No, Your Honor.

9 **MS. FORREST:** Nothing that I can think of,
10 Your Honor. Thank you.

11 **THE COURT:** We are five minutes ahead of schedule.
12 Shall we begin?

13 **MS. MOSKOWITZ:** Yes, Your Honor.

14 **THE COURT:** Let's bring the witness back in.

15 Mr. Weissinger, good morning, sir.

16 **THE WITNESS:** Good morning, Your Honor.

17 **THE COURT:** I will remind you that you remain under
18 oath. Do you understand that?

19 **THE WITNESS:** Yes.

20 **MATTHEW WEISSINGER,**

21 called as a witness for the Plaintiff, having been previously
22 duly sworn, testified further as follows:

23 **THE COURT:** All right, Ms. Moskowitz, you may
24 proceed.

25 **MS. MOSKOWITZ:** Good morning, Your Honor. Even

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1 though you said my name, I will confirm, Lauren Moskowitz for
2 Epic.

3 **DIRECT EXAMINATION** (resumed)

4 **Q.** Good morning, Mr. Weissinger.

5 **A.** Good morning.

6 **Q.** We left off on Friday speaking about the work that Epic
7 does to market and promote *Fortnite* on its own. Did Epic do
8 any marketing in connection with any of its platform partners?

9 **A.** Yes.

10 **Q.** Does the level of support that Epic receives differ across
11 partners?

12 **A.** Yes, it does.

13 **Q.** How so?

14 **A.** In general, we receive more support from our console
15 partners than we do from our mobile partners.

16 **Q.** So let's focus for now on the consoles. What are the ways
17 that consoles help market *Fortnite*?

18 **A.** Sure. There are a number of ways. There's, you know,
19 kind of physical in-real-life support that we receive. We get
20 digital support from the console partners. We also receive
21 in-game support as well.

22 **Q.** So in terms of the retailer physical, real life, as you
23 put it, can you describe what that looks like?

24 **A.** Sure. *Fortnite* is a digital-only game by and large, so
25 one of the ways that we partner with our console partners

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1 that's really valuable to us is to secure kind of this in
2 real-life brick and mortar presence, and we partner with them
3 in a number of ways for that.

4 One example is through hardware bundles. So we would
5 create some exclusive *Fortnite* content, and we would pair it
6 with a PlayStation or with an Xbox, the actual console, and
7 then we would put it all in a nice pretty package, and then we
8 sell it at retail at like your Best Buy or Wal-Mart or
9 something like that.

10 We also create a retail SKU, and this is like basically
11 when you think of a traditional video game that you are buying
12 in the DVD box, we create these with the first-party partners:
13 Nintendo, Microsoft, Sony. That includes digital content.
14 And we in general create one every holiday and then we do
15 price promotions throughout the year on those bundles as well.

16 There is other ways we co-promote in real life. An
17 example would be with Xbox. Microsoft has Microsoft stores
18 that are in malls, and so we actually partnered with Microsoft
19 to do a Friday *Fortnite* series where every Friday, they would
20 host play sessions where people could come in kind of off the
21 street or within the mall, and they could play *Fortnite* and
22 win and earn prizes, and it was really successful for them and
23 us. We re-upped that program multiple times with them.

24 PlayStation, we'll do similar stuff. For the E3 Expo --
25 this is kind of the big consumer event -- *Fortnite* held an

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1 event and -- at the L.A. Coliseum, and PlayStation went and
2 brought in this giant kind of semitruck with all these
3 PlayStations inside and consoles that people could play.

4 We partnered with them the opposite direction, too, where
5 we provided *Fortnite* characters who would actually appear at
6 the festival that PlayStation sponsors, the college football
7 festival every year, and they invite us and we participate,
8 and there is a number of ways we go back and forth with them.

9 **Q.** I think one of the other categories you mentioned was
10 digital support. Can you explain what that refers to?

11 **A.** Sure. We co-promote on our social channels with Fortnite
12 channels and the first party console platforms. They have
13 really huge social channels as well. They're probably on par
14 with ours in terms of just overall size and reach.

15 In addition to that, we partner with our console partners
16 on featuring on the consoles themselves. And what that means
17 is when you actually boot up a PlayStation or Xbox, there are
18 certain tiles or images on the screen that Microsoft and Sony
19 will help provide for us. And not only when you first boot
20 up, but also they have a separate area of -- on console called
21 like the Xbox Store or the PlayStation Store where they
22 provide additional featuring as well in that purchase
23 environment.

24 **Q.** And how do you view the featuring within the console
25 stores? Do you view that as helpful, meaningful?

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1 **A.** Yes, very.

2 **Q.** How?

3 **A.** The store featuring them would get -- and I'm saying in
4 Xbox Store and Xbox or in PlayStation Store and PlayStations,
5 very valuable because when you think about a player journey of
6 somebody booting up their console and then they go in, and
7 when they enter the store experience, they're definitely going
8 in a purchasing mindset, and so it's a very qualified audience
9 of folks who are looking to spend money and who are looking to
10 buy an awesome experience or awesome content, and so when
11 Microsoft and Sony provide those placements specifically, they
12 are extremely valuable to us.

13 **Q.** And I think you spoke about this on Friday, but just to
14 remind everyone, what is available on the console digital
15 stores with respect to *Fortnite*?

16 **A.** Sure. Another key thing to point out is that Xbox and
17 PlayStation and Nintendo, they offer these Real Money
18 Transactions, or the RMTs that I mentioned that are sold
19 separately and alongside the client. What is really important
20 about that is Microsoft and Sony can then merchandise those
21 offers within their store experience and lead to a direct
22 player purchase of those packs, and so the key there is that
23 in order to purchase something, somebody actually doesn't have
24 to boot up in the *Fortnite* client and then wait for a load
25 stream and then go to the item shop and then go make the

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1 purchase. They have this functionality where they can
2 merchandise the RMT separately and directly so it's a much
3 more quick and clean purchase for the user.

4 **Q.** You also mentioned within *Fortnite* support that the
5 consoles provide. Can you explain what that refers to?

6 **A.** I'm sorry? What was --

7 **Q.** Within *Fortnite* that the consoles also provide support.
8 Can you describe what that refers to?

9 **A.** Sure. We've also partnered with, you know, Microsoft,
10 Sony, Nintendo, on in-game promotions so in the *Fortnite*
11 client in a number of ways. One example is your competitive
12 tournaments. So we will throw a PlayStation Cup or Xbox Cup
13 or Nintendo Switch Cup in partnership with those first
14 parties.

15 Competitive events are some of our most engaging events
16 that we do inside *Fortnite*, and we always see a really
17 exceptional response from the community that is manifested
18 also inside the game.

19 So when we ran -- for example, with Nintendo, we ran a
20 Switch Cup in Japan. It was specially made for Japanese
21 region. And at the time it led to the highest daily active
22 users of all time in Japan on Switch when we ran that
23 tournament with them. So it's a really good engagement
24 program that we run with them.

25 **Q.** Are there other types of work that you do with consoles

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1 within *Fortnite* itself?

2 **A.** Yes. You know, I mentioned that we do a lot of IP
3 crossovers and collaborations. We actually partnered with
4 Microsoft and PlayStation on a major IP crossover where they
5 actually contributed some of their own IP which was Master
6 Chief from the Halo franchise and Xbox and Kratos from the God
7 of War franchise and PlayStation. These are like the Mickey
8 Mouse of PlayStation and Xbox, and so they actually provided
9 these characters to appear in *Fortnite*. They were purchasable
10 on the other platforms as well, and they were playable on the
11 other platforms as well. And we went and actually announced
12 that at the Video Game Awards, and it was kind of a big event
13 in the gaming communities to see that kind of collaboration
14 and crossover and all of it happening inside of *Fortnite*
15 thanks to the first parties.

16 **Q.** So across all of these ways that you partner with
17 consoles, how do you go about actually achieving or activating
18 those -- that work with them?

19 **A.** I'm sorry. Would you repeat that once more?

20 **Q.** Sure. So how do those promotions sort of come about? How
21 do you work with the console partners to achieve those
22 promotions?

23 **A.** Sure. We work very closely to basically review our
24 forward roadmaps with the first parties, and so we have weekly
25 meetings with console partners where I'd say we review more

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1 block-and-tackle stuff. This is when we are providing
2 creative assets for upcoming promotions, what the embargo
3 times are, what the approvals process kind of currently looks
4 like. But then beyond that, we actually have biweekly and
5 monthly meetings with Microsoft and Sony where we review from
6 a business level our forward-looking content roadmaps, and
7 those are roadmaps that are broken [sic] out -- broken out
8 almost on a daily basis in terms of the opportunities inside
9 of *Fortnite*, and we break it down in terms of kind of
10 platinum, gold, silver, bronze in terms of what the best
11 opportunities are from the *Fortnite* side, and then we kind
12 of -- we review that then with Microsoft and Sony, and then we
13 figure out which places we're going to be able to collaborate
14 and add additional promotional support around those major
15 beats. So it's very in depth and detailed.

16 **Q.** So let's turn to Apple now. At what point in time did
17 *Fortnite* launch on iOS?

18 **A.** I believe it was March of 2018.

19 **Q.** How was *Fortnite* doing overall when it launched on iOS?

20 **A.** *Fortnite* was doing incredible. It was basically a
21 cultural phenomenon at the time.

22 **Q.** When *Fortnite* was available on iOS, did Apple do anything
23 to market *Fortnite*?

24 **A.** Yes, they did.

25 **Q.** What did they do?

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1 **A.** They'll provide things like featuring. They will provide
2 kind of news articles. They will provide social support, are
3 some of the ways.

4 **Q.** So, generally speaking, overall, how would you say Apple
5 was as a partner from a marketing perspective?

6 **A.** I always felt like it was opportunistic. I felt like it
7 was transactional, impersonal. It always felt like in some
8 sense it was kind of fly-by-night where they could come in for
9 a particular promotion, they would show up, and they would ask
10 for assets and then there would be strings attached or caveats
11 attached of *well, we want to promote this thing but we require*
12 *an exclusive asset or we require exclusive content*, and those
13 requests would come in kind of late in the process, and it
14 would cause undue burden and stress on the team. These were
15 requests that typically we don't receive from our console
16 partners.

17 And oftentimes we would receive requests for promotion
18 through some sort of like a notification tool that would say,
19 "Hey, featuring is coming. We need an asset in some short
20 amount of turnaround time." And it would just kind of arrive
21 and a lot of times people would say -- we'd have to spin
22 things up and say, "Hey, we got this request." You know, "Can
23 we do it? Why didn't we know about it sooner?" "I'm not
24 sure. It just arrived in the dashboard. And can we get this
25 thing done?" So it was just a different experience from our

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1 console partners.

2 **Q.** You mentioned the word "opportunistic" with respect to
3 Apple's support. What do you mean by that?

4 **A.** Yeah. So in some of the instances where I think Apple
5 would lean in the most for a particular promotion, it
6 typically, to me, felt like it was around opportunities where
7 they had something else within their ecosystem to promote.

8 And there is a couple examples that I can think of for
9 that. Most specifically it was around music collaborations
10 like Marshmello and Travis Scott where they would also want to
11 promote Apple Music, and they would ask for exclusive content
12 like playlists and stuff in support of that as well --

13 **THE COURT:** So, I take it, when you did these
14 collaborations with Microsoft and Sony, they weren't promoting
15 their things? I mean they weren't promoting PlayStation and
16 Xbox? How is it different?

17 **THE WITNESS:** It's almost like they're separate --
18 it's not like a PlayStation Music that they would be wanting
19 to promote --

20 **THE COURT:** But they were promoting their product,
21 weren't they, whenever you did collaborations with them?

22 **THE WITNESS:** I mean, it would be available on Xbox
23 and available on PlayStation, sure.

24 **THE COURT:** Is it one-sided only on *Fortnite* for
25 *Fortnite's* benefit when you do collaborations with Microsoft

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1 and Sony, or does it benefit both?

2 **THE WITNESS:** No, you're right. It benefits both.

3 **THE COURT:** So how is it different that Apple is
4 trying to benefit both?

5 **THE WITNESS:** It just seemed opportunistic that the
6 times that they wanted to support us was specifically around
7 content related to another part of the business as opposed to
8 helping collaborating the *Fortnite* business.

9 **THE COURT:** Proceed.

10 **BY MS. MOSKOWITZ:**

11 **Q.** You mentioned the social media aspect that Apple provided
12 some support in. Have those been meaningful to *Fortnite*?

13 **A.** No. *Fortnite's* channels again are extremely large, some
14 of the largest in all of entertainment. Frequently I would
15 have my social media manager who would come to me and say,
16 "Hey, should we keep doing these promotions with the App
17 Store," because they would consistently ask for re-Tweets and
18 re-shares of content because *Fortnite* content gets a ton of
19 engagement, and so when we kind of re-Tweet and re-share their
20 content, it helps gain traction on their channels, and the
21 perception was that they were trying to meet some sort of
22 performance metrics of engagement on their channels, and so
23 they wanted to have *Fortnite* kind of constantly re-share their
24 content.

25 **Q.** With respect to the featuring on the App Store, was

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1 that -- was that meaningful to *Fortnite*, and how did it
2 compare to the engagement you had from the console stores?

3 **A.** Yes. In general, we -- we -- we don't turn down
4 featuring. When you compare the featuring that's provided by
5 Apple, though, in comparison to Xbox and PlayStation, for
6 example, the featuring is just more valuable, and we see that
7 in terms of the users who are coming into the game.

8 The featuring that were provided by Xbox and PlayStation
9 provides players who continue longer and who monetize better
10 versus what we see at the App Store, and it's, you know -- my
11 general thinking is that the App Store has a very different
12 behavior for people who are going through that experience.
13 It's very much like a browsing behavior, and it's not
14 necessarily people making a purchase. It also is like all
15 sorts of kinds of random folks who are going through that
16 experience. It might be somebody looking for a fitness app or
17 finance app or something like that. And so the featuring,
18 when it is provided, it's just to a kind of less qualified
19 audience.

20 **THE COURT:** You mean consumers? A less qualified
21 consumer?

22 **THE WITNESS:** Yes.

23 **THE COURT:** Okay. And consumers who may not be
24 looking for gaming apps?

25 **THE WITNESS:** Correct.

WEISSINGER - DIRECT - MOSKOWITZ

1 **THE COURT:** Okay. Thank you.

2 **THE WITNESS:** Or entertainment apps or entertainment
3 experiences.

4 **BY MS. MOSKOWITZ:**

5 **Q.** You said more valuable, and I'm not staring at a
6 transcript. I just want to make it clear.

7 From your perspective, which featuring -- was it on
8 consoles or Apple that you viewed as more valuable?

9 **A.** Consoles.

10 **Q.** Have any problems ever arisen with respect to Apple's
11 featuring?

12 **A.** Yes.

13 **Q.** What are some examples?

14 **A.** In multiple instances, Apple actually leaked our
15 promotional content ahead of our promotional beat.

16 **Q.** Do you have any examples of those leaks?

17 **A.** Sure. In December of 2018, we had our Season 7 Launch.
18 This was kind of our Christmas holiday season launch. It was
19 a big launch for us. Apple leaked the Battle Pass key art
20 content, so all the characters that were coming with the new
21 season leaked in advance of the official *Fortnite* reveal.

22 Then in, I believe it was, February of 2019, for that same
23 Marshmello concert that I mentioned, Apple had requested an
24 exclusive plays -- playlist for Apple Music, and they pushed
25 that playlist before the concert and spoiled the set list and

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1 the reveal for kind of our first major in-game concert.

2 The third one was related to our Chapter 2 Launch, and so
3 this was, I believe, October 2019. For this particular beat,
4 the Chapter 2 Launch was basically the sequel launch of
5 *Fortnite*. It was the biggest event that we had had since the
6 launch of the game, and it was something that we had planned
7 for and coordinated, you know, a year in advance. And we had
8 all sorts of narrative elements that kind of came together
9 where *Fortnite* was going to get sucked into a black hole and
10 it was going to go down for 36 hours and it was going to kind
11 of disappear and then it was going to come up and all the
12 players were going to jump into the game and kind of see what
13 had happened, what changed on map and what new gameplay
14 features were in there.

15 Apple leaked the promotional key art prior to the
16 release -- prior to that release while we were in this kind of
17 black hole blackout period, and it really spoiled a lot of
18 hard work and efforts and coordination and sequencing.

19 **MS. MOSKOWITZ:** Your Honor, I have a binder for the
20 witness and for the Court. May I approach?

21 **THE COURT:** You may.

22 **BY MS. MOSKOWITZ:**

23 **Q.** Mr. Weissinger, if you could turn to PX2435 in your
24 binder.

25 **A.** Okay.

WEISSINGER - DIRECT - MOSKOWITZ

1 **Q.** This is an email you received on October 2, 2019. Do you
2 see that?

3 **A.** Yes.

4 **Q.** Do you recognize this document?

5 **A.** Yes.

6 **MS. MOSKOWITZ:** Your Honor, I offer PX2435 into
7 evidence.

8 **THE COURT:** Any objections?

9 **MR. DOREN:** No objection, Your Honor.

10 **THE COURT:** 2435 is admitted.

11 (Plaintiff's Exhibit 2435 received in evidence)

12 **THE COURT:** I did forget to go over the exhibits this
13 morning, so we will do Friday and Monday at the end of today.

14 **MS. MOSKOWITZ:** Thank you, Your Honor.

15 **Q.** If you could please focus on the bottom part of the page,
16 do you see that that's an email from Mike Schmid of Apple? Do
17 you see that?

18 **A.** Yes, I do.

19 **Q.** If you could turn to the second page of the document,
20 PX2435.2, that last big paragraph that starts with, "If you
21 can secure us," do you see that?

22 **A.** Yes.

23 **Q.** What is Mr. Schmid communicating to Epic in this
24 paragraph?

25 **A.** He is requesting assets for promotion of the Chapter 2

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1 Launch, and he says he will take personal responsibility for
2 them and limit the exposure to the absolute minimum to the
3 amount of folks needed to cut and prepare an event for launch.

4 He says, "I know we have had issues in the past with a
5 significant art leak, but I will remain extremely close to
6 this and can assure you that that will not happen."

7 **Q.** Do you recall Mr. Schmid promising he would take personal
8 responsibility for the Chapter 2 artwork?

9 **A.** Yes.

10 **Q.** And do you recall Mr. Schmid acknowledging a prior leak
11 had occurred at Apple in the past?

12 **A.** Yes.

13 **Q.** And do you recall him assuring you that it would not
14 happen with the Chapter 2 artwork?

15 **A.** Yes.

16 **Q.** Did Apple leak the Chapter 2 artwork?

17 **A.** Yes.

18 **Q.** So just circling back for a moment to the types of support
19 that Epic's console partners have offered *Fortnite*, did Apple
20 ever execute a hardware bundle that included *Fortnite* content?

21 **A.** No.

22 **Q.** Did Apple ever host any *Fortnite* events or promotions in
23 Apple's retail stores?

24 **A.** No.

25 **Q.** Did Apple participate in any in-*Fortnite* promotions such

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1 as IP collaborations or competitive events?

2 **A.** No.

3 **Q.** From a user acquisition perspective, is there a platform
4 on which *Fortnite* has the biggest growth potential?

5 **A.** Yes.

6 **Q.** Which one?

7 **A.** Mobile.

8 **Q.** Why?

9 **A.** I mentioned it on Friday, I believe, but we've reached,
10 you know, a point of basically full penetration on console,
11 and mobile represents the biggest growth opportunity, and, you
12 know, the best way to kind of put it is everybody has a mobile
13 device, and they have it with them at all times, but not
14 everybody has a console, and not everybody has a gaming PC.

15 **Q.** So how does iOS within that mobile umbrella fit into your
16 user acquisition plans?

17 **A.** It's hugely important.

18 **Q.** When *Fortnite* was on iOS, do you recall how many users it
19 had?

20 **A.** When we were live, I believe it was 2.5 million daily
21 active users on iOS. I think over the life of iOS, we had
22 something like 2.86 billion hours of playtime on iOS.

23 **Q.** And in terms of that daily active user statistic you gave
24 of 2.5 million, do you have a sense of what percentage of that
25 is overall of the daily active users?

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1 **A.** It was about 10 percent.

2 **Q.** Has Epic been harmed by not being able to offer *Fortnite*
3 on iOS?

4 **A.** Yes. Absolutely.

5 **Q.** How so?

6 **A.** In a number of ways.

7 So I mentioned first of all that everybody has a phone but
8 not everybody has a console and not everybody has a gaming PC,
9 so already there was a portion of our population who only
10 played on iOS. Then all of a sudden, we disappeared because
11 that was the only device they had.

12 In addition, there's just times of the day where normally
13 you would have your iPhone available as a device that you
14 wouldn't like you would an Xbox or a gaming PC, so imagine
15 you're commuting to work or you're outside or you're going to
16 a friend's house or something like that. You just no longer
17 had this device that was on you at all times, and so there was
18 just less opportunity to play *Fortnite*.

19 In addition to that, once all those users -- once those
20 users left and those playtime windows shrunk, there were also
21 severed friend connections, so social connections. And, you
22 know, I mentioned that also a little bit on Friday, just how
23 important social connections are. The more you have, kind of,
24 more you play and want to play in *Fortnite*, and so there were
25 tens of millions of social connections that had been -- kind

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1 of immediately were severed when Apple removed *Fortnite*, so
2 there was just separately --

3 **THE COURT:** Tens of millions? You said that 10
4 percent of 2.5 million were iOS users. So how are there tens
5 of millions of severed connections?

6 **THE WITNESS:** That's a good question. It's because
7 each -- each player, each person has multiple friend
8 connections that goes out.

9 **THE COURT:** And are you tracking people's
10 connections?

11 **THE WITNESS:** Correct.

12 **THE COURT:** You track that? You have that data?

13 **THE WITNESS:** Yeah. And that's in order so that
14 people can chat with each other and they can match-make. It's
15 basically this is your friends list inside of *Fortnite*.

16 **THE COURT:** And is that data coming into evidence?

17 **MS. MOSKOWITZ:** Not from us, Your Honor.

18 **THE COURT:** And people know you're tracking them?
19 Yes?

20 **THE WITNESS:** Yes. Yes. It's a totally opt-in
21 process -- I mean, it's the basic -- Lauren is jumping in, I'm
22 jumping in, we make a friend connection in the game, and the
23 next time we log in, we can see when the other is online, we
24 can chat with each other, but any particular player might have
25 multiple friends or lots of friends. So when one mobile user

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1 gets removed, all the social connections that were going out
2 with them go away, and so there is -- you basically have lost
3 a friend, but you have lost even more social connections
4 inside of the ecosystem.

5 **THE COURT:** I see.

6 **BY MS. MOSKOWITZ:**

7 **Q.** And just in case my -- the question and answer wasn't
8 clear, with respect to the 10 percent, the 2.5 million daily
9 active users is 10 percent of the overall daily active users?

10 **A.** Correct.

11 **Q.** So approximately how many overall daily active users do
12 you have?

13 **A.** It was about 30 million.

14 **Q.** Do you have a general understanding of what consoles
15 charge in terms of commissions on in-app purchases?

16 **A.** Yes.

17 **Q.** And what is that?

18 **A.** 30 percent.

19 **Q.** And do you have an understanding of what Apple charges as
20 a commission on in-app purchases?

21 **A.** Yes.

22 **Q.** What is that?

23 **A.** 30 percent.

24 **Q.** So are those -- aren't those the same commission?

25 **A.** No. They're two -- they're two completely different

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1 business models.

2 **Q.** So can you explain what you mean?

3 **A.** Sure. Generally how I understand how it works is
4 PlayStation, Xbox, Nintendo, they sell their hardware and they
5 subsidize it.

6 **THE COURT:** So why did you say how you understand it
7 works. Do you know or not?

8 **THE WITNESS:** I do. I mean, I haven't seen the
9 contracts because I have never worked on the first party side,
10 but in general, I -- working in the business as long as I
11 have, I have a general understanding.

12 **THE COURT:** As long as you know, because I'm not
13 interested in if you don't have a foundation for what you're
14 about to say.

15 **THE WITNESS:** Okay.

16 **THE COURT:** Go ahead.

17 **THE WITNESS:** Great.

18 So how it works is PlayStation, Xbox, and Switch subsidize
19 their hardware sales, which basically means they are selling
20 it at a loss when they first launch a console. And so right
21 out of the gate, they're losing money in order to actually get
22 the most widespread adoption and penetration of consoles as
23 possible. They are trying to expand that -- that
24 entertainment ecosystem as wide as possible. So they are
25 losing money up front.

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1 They make their money back when *Fortnite* and other apps
2 are sold on those platforms, and so they're only making money
3 when we're making money, and they are absolutely then aligned
4 and invested around assuring the success of the titles on
5 their platforms.

6 You contrast that with Apple. They actually generate
7 profit on their hardware sales.

8 **THE COURT:** And how do you know that?

9 **THE WITNESS:** I believe they announce their hardware
10 profit margins in their earning reports. And so Apple makes
11 profit on their hardware, but none of that revenue or dollars
12 are shared with app developers.

13 You know, the app ecosystem, that is one of the things
14 that is used to sell these devices and the value of these
15 devices. And then apps like *Fortnite* put in a huge amount of
16 marketing effort, a huge amount of support to drive events and
17 people to download their apps. We create all sorts of
18 engagement, hours of engagement inside of *Fortnite*, and then
19 at the last minute, kind of, Apple injects themselves and
20 says, "We require 30 percent on this as well."

21 And then I look at the promotional support that Apple is
22 doing to kind of earn that 30 percent, and I compare it to the
23 consoles, and it just seems like -- it just seems like a gross
24 imbalance, it seems unfair, and it seems unethical.

25 **MS. MOSKOWITZ:** Thank you, Mr. Weissinger.

WEISSINGER - CROSS - DOREN

1 No further questions at this time, Your Honor.

2 **THE COURT:** Cross.

3 **CROSS-EXAMINATION**

4 **BY MR. DOREN:**

5 **Q.** Good morning, Mr. Weissinger.

6 **A.** Good morning.

7 **Q.** My name is Richard Doren. I don't believe we've had the
8 pleasure, but it's a pleasure to meet you today.

9 **A.** You as well.

10 **Q.** A few moments ago you were stating that Apple accounted
11 for about 10 percent, and by "Apple," I mean iOS devices
12 accounted for about 10 percent of *Fortnite* play while *Fortnite*
13 was on iOS; correct?

14 **A.** Yes.

15 **Q.** And, in fact, the revenue or the percentage of revenue
16 generated by those on iOS for Epic through *Fortnite* is about 4
17 percent of the total revenue during the time that *Fortnite* was
18 on iOS; correct?

19 **A.** I can't confirm off the top of my head, but in general, it
20 probably was lower than the share of -- yeah, attached.

21 **Q.** And you were just discussing the business model for
22 different console manufacturers. Have you ever seen any
23 internal documents from Microsoft, Sony, or Nintendo that had
24 proven to you that consoles are sold at a loss?

25 **A.** I have not.

WEISSINGER - CROSS - DOREN

1 **Q.** And, sir, are you aware that after testifying -- after
2 Ms. Wright testified on behalf of Microsoft in this courtroom,
3 that Microsoft has refused to make any public statements about
4 whether or not the consoles are sold at a loss?

5 **A.** I'm not aware of that and I have not.

6 **Q.** And so you have no personal firsthand knowledge that
7 Microsoft, Sony, or Nintendo sell their consoles at a loss;
8 correct?

9 **A.** Only anecdotally.

10 **Q.** Sir, you're aware this is the sixth day of this trial;
11 correct?

12 **A.** Yes.

13 **Q.** And you're the last of the Epic fact witnesses; right?

14 **A.** I believe so.

15 **Q.** Has anyone explained to you why no one from Epic has shown
16 this Court *Fortnite*?

17 **A.** I'm not sure.

18 **MS. MOSKOWITZ:** Objection.

19 **THE WITNESS:** I think we showed some videos.

20 **BY MR. DOREN:**

21 **Q.** And that's about the three or four five-second clips from
22 Friday afternoon?

23 **A.** It was longer than that, but, yes.

24 **Q.** Less than a minute, though; right?

25 **A.** I'm not sure of the exact time, but it was about a minute.

WEISSINGER - CROSS - DOREN

1 Q. What I would like, sir, is your assistance now, curiously
2 as the defendant in this case, to explain your game to this
3 Court. All right?

4 A. Sure.

5 Q. And we've got a few demonstratives and a few exhibits to
6 help us in that effort, and I would ask -- I would direct your
7 attention to the monitor in front of you. And this -- first
8 of all, do you have a name for this screen?

9 A. "Submenu Select," I think.

10 Q. All right. And, in fact, do you see at the bottom of the
11 page the little bouncing message to "select a game mode";
12 correct?

13 A. Correct.

14 Q. And across this screen, we have three game modes; am I
15 right?

16 A. Yes.

17 Q. And all of these are within the *Fortnite* app; correct?

18 A. Yes. *Save the World* was not available on iOS.

19 Q. Okay. And *Save the World* was the first *Fortnite* game;
20 correct?

21 A. *Save the World* is also not available on Switch.

22 Q. Okay. Thank you, sir.

23 *Save the World* was the first *Fortnite* game?

24 A. It was the first version of *Fortnite*.

25 Q. Yeah. Thank you. Well put.

WEISSINGER - CROSS - DOREN

1 And it -- it's a game in which people team up to shoot
2 zombies; correct?

3 A. That's a good summary.

4 Q. Okay. It's a good summary, is that what you said, sir?

5 A. Yes.

6 Q. Thank you.

7 And then the next game is available on iOS, correct, and
8 that's *Battle Royale*?

9 A. That's correct.

10 Q. And *Battle Royale* is the game that made Epic games both
11 rich and famous; correct?

12 A. I'd like to say we had some fame before then, but, yes,
13 this is the mode that people characterize with the success of
14 Epic.

15 Q. And then within *Battle Royale* there is another mode,
16 something called *Party Royale*; correct?

17 A. That's correct.

18 Q. That's within *Battle Royale*; am I right?

19 A. It is in the mode select within *Battle Royale* at the top.

20 Q. Thank you.

21 And then on the right, we have *Creative*; correct?

22 A. Correct.

23 Q. And that's the third mode of *Fortnite*?

24 A. As designated on this screen.

25 Q. And as you've already described, *Save the World* is not

WEISSINGER - CROSS - DOREN

1 available on iOS and it's currently not available on Switch;
2 correct?

3 A. That's correct.

4 Q. All right. So let's focus on *Battle Royale* and *Creative*
5 then for the rest of our time.

6 A. Great.

7 Q. And I'd like to go to the lobby, please, and for the
8 record, we are connecting and changing screens, and, sir, we
9 have in front of us a new set of images. And what is this
10 screen showing?

11 A. This is your matchmaking lobby.

12 Q. Thank you. And we have a large yellow banana here, don't
13 we, in a tuxedo?

14 A. Yes. That is Peely.

15 Q. And that's Peely, did you say?

16 A. Yes.

17 Q. And, in fact, in the tuxedo he is known as Agent Peely;
18 correct?

19 A. That's correct.

20 Q. And we thought it better to go with the suit than the
21 naked banana since we are in federal court this morning.

22 And, sir, Agent Peely is actually an exclusive; in other
23 words, the Agent Peely persona over Peely, the banana, was an
24 exclusive for Chapter 2, Season 2 of *Fortnite*; correct?

25 A. You know, even I am not sure, but I'll take your word for

WEISSINGER - CROSS - DOREN

1 it, and, yes.

2 **Q.** And do you recall, sir, that Agent Peely came -- became
3 available with the Battle Pass from that season?

4 **A.** Maybe this version of Agent Peely. I believe Peely first
5 came in in -- he came in earlier than that.

6 **Q.** Okay.

7 **A.** The naked version that you are referencing.

8 **Q.** And Battle Passes cost 950 V-Bucks; is that correct?

9 **A.** That's correct.

10 **Q.** And what does a Battle Pass get one?

11 **A.** You get a whole host of cosmetics, maybe a hundred
12 different items to unlock, and you unlock them by playing
13 inside of the game. In general, they come with seven outfits
14 so something like this. You get seven characters, and then in
15 total, 100 different cosmetics that unlock as you play the
16 game.

17 **Q.** And, by the way, Epic has also begun a subscription
18 service for *Fortnite*; correct?

19 **A.** That's correct. *Fortnite* --

20 **Q.** And that -- pardon me.

21 **A.** I'm sorry. *Fortnite* Crew. Yes.

22 **Q.** That started in December of 2020; correct?

23 **A.** That is correct.

24 **Q.** And the monthly cost is \$11.99; correct?

25 **A.** Yes. That is correct.

WEISSINGER - CROSS - DOREN

1 Q. And from here I'd like to go to what at least I've been
2 calling the "game selector page." Do you have a name for this
3 screen, sir?

4 A. This is the "Mode Select."

5 Q. Okay. I was close. I was close.

6 And the top row is our various *Battle Royale* formats;
7 correct? Solo, Duos, Trios, Squads; correct?

8 A. Correct.

9 Q. And the second row I see includes *Party Royale*; true?

10 A. Yes.

11 Q. And then the bottom row is your various *Creative*
12 opportunities; correct?

13 A. Yes.

14 Q. All right. So this is basically, as you've already said,
15 a menu of options for different games within *Fortnite*;
16 correct?

17 A. What we would call them in general is "limited time
18 modes."

19 Q. Thank you. Turning specifically to *Battle Royale*, *Battle*
20 *Royale* launched in September 2017 on consoles and PCs; is that
21 right?

22 A. That is correct.

23 Q. And you joined the company in March 2016. Do I have that
24 right?

25 A. May 2016.

WEISSINGER - CROSS - DOREN

1 **Q.** Thank you.

2 And you were hired as the director of marketing?

3 **A.** That is correct.

4 **Q.** And you have since been promoted to vice-president;
5 correct?

6 **A.** That is correct.

7 **Q.** And you were in charge of *Fortnite* marketing as of
8 September 2017; correct?

9 **A.** Yes, I was.

10 **Q.** And you were specifically in charge of the launch of
11 *Battle Royale* in September 2017; correct?

12 **A.** Yes, I was.

13 **Q.** And the marketing area put together a trailer for its new
14 game, *Battle Royale*; correct?

15 **A.** Yes, we did.

16 **Q.** And Epic Games maintains its own YouTube channel; is that
17 correct?

18 **A.** Yes, we do.

19 **Q.** In putting that trailer together, you wanted to generate
20 excitement around the new game; correct?

21 **A.** Yes, that's correct.

22 **Q.** But you also wanted to portray it accurately; true?

23 **A.** Yes.

24 **Q.** So you did your best to capture the game accurately and to
25 attract the audience that you hoped would play your game;

WEISSINGER - CROSS - DOREN

1 correct?

2 **A.** Yes.

3 **Q.** And do you recognize, sir, the page in front of you on the
4 screen which is entitled "Fortnite Battle Royale Gameplay
5 Trailer." Do you recognize that as the, I'll call it, title
6 page, if you will, for that trailer?

7 **A.** Yes. That looks correct because it has 60 million views.

8 **Q.** Thank you.

9 And do you see it's at about 60 million views; correct?

10 **A.** Yes.

11 **Q.** That's impressive.

12 And, Your Honor, I would like to mark this trailer as
13 DX5541. I do have it on a thumb drive for the Court, and
14 after we've played it, I will move it into evidence.

15 **THE COURT:** Okay. That's fine. Is there -- I take
16 it there is going to be words?

17 **MR. DOREN:** There are not going to be words,
18 actually, Your Honor. It's visual.

19 **THE COURT:** Go ahead, then.

20 **MR. DOREN:** Mr. Spalding, please.

21 (Whereupon, the video was played.)

22 **THE COURT:** So the record should reflect there was
23 a -- some song playing in the background with words, and the
24 court reporter was relieved of her duties to transcribe those
25 words.

WEISSINGER - CROSS - DOREN

1 **MR. DOREN:** Thank you, Your Honor. And I apologize
2 for that oversight, and we will provide the Court with a
3 transcript of those lyrics.

4 **THE COURT:** I don't know that that is necessary.
5 Ms. Moskowitz?

6 **MS. MOSKOWITZ:** I agree.

7 **THE COURT:** Any objection to 5541?

8 **MS. MOSKOWITZ:** No, Your Honor.

9 **THE COURT:** It's admitted.

10 (Defense Exhibit 5541 received in evidence)

11 **BY MR. DOREN:**

12 **Q.** Mr. Weissinger, *Battle Royale* is generally referred to in
13 the video game field as a third-person shooter game; correct?

14 **A.** It is a mode of play that can be played in third person or
15 first person. There is a lot of other first person *Battle*
16 *Royale* games.

17 **Q.** And the third person shooter mode is one where you are
18 kind of looking over the shoulder of the avatar that you are
19 steering; correct?

20 **A.** That's correct.

21 **Q.** And the point of *Battle Royale* is to be the last survivor;
22 correct?

23 **A.** Yes. The last player standing.

24 **Q.** That's how you win?

25 **A.** Uh-huh.

WEISSINGER - CROSS - DOREN

1 **Q.** And the way that the game works is you're playing on an
2 island; correct?

3 **THE COURT:** Is that "yes"?

4 **THE WITNESS:** Yes.

5 **THE COURT:** "Uh-huhs" can go either way.

6 **THE WITNESS:** Sorry.

7 **MR. DOREN:** Thank you, Your Honor.

8 **Q.** And the game takes place on an island; correct?

9 **A.** Yes.

10 **Q.** And over the course of the game, the island is surrounded
11 by a storm; correct?

12 **A.** Correct.

13 **Q.** And the storm slowly closes in; true?

14 **A.** Correct.

15 **Q.** And so the players have to stay inside the storm, in the
16 eye of the storm, if you will; right?

17 **A.** Yes. So they take the image.

18 **Q.** So they are driven together toward the middle of the
19 island so that ultimately whoever is left is squeezed together
20 and they shoot it out; right?

21 **A.** Yes. So the match will end.

22 **Q.** So when we talked about getting together with your friends
23 to watch a match, you're getting together to watch this fight
24 to the death; correct?

25 **A.** If you're playing *Battle Royale*, yes.

WEISSINGER - CROSS - DOREN

1 **Q.** Let's take a look, please, at *Party Royale*, and going to
2 the selection screen, which we were on before we played the
3 trailer, do you see in the upper right-hand corner Epic's
4 description of *Party Royale*?

5 **A.** Yes, I do.

6 **Q.** And it states, "Welcome to *Party Royale*, an experimental
7 and evolving space. Leave your weapons and materials behind
8 and hang out with friends, play games and enjoy live
9 entertainment, catch live shows, race around obstacle courses
10 by land or sea, go fishing with friends, perfect your
11 skydive," etc. Did I read that accurately?

12 **A.** Yes.

13 **Q.** Now, let's take a quick look, if we can, inside *Party*
14 *Royale*.

15 (Whereupon, the video is playing.)

16 **BY MR. DOREN:**

17 **Q.** And is this the street seen in *Party Royale*?

18 **A.** This is -- yes. They are in *Party Royale*.

19 **Q.** Okay. And our avatar now is running toward a skydiving
20 activity; correct?

21 **A.** Yes.

22 **Q.** Do you know this game, sir, the *Skydive Glide Drop*?

23 **A.** Yes.

24 **Q.** And our avatar is going through hoops, correct, and trying
25 to do it in as fast a time as possible; am I right?

WEISSINGER - CROSS - DOREN

1 **A.** That's correct.

2 **Q.** And, in fact, our avatar then gets a B rank and a message
3 that he set a new course record; true?

4 **A.** Yes.

5 **Q.** And then he has a dance; right?

6 **A.** Yes.

7 **Q.** And you recognize that dance as being by the name of
8 Slick, and it's available in the Items Store on *Fortnite*;
9 correct?

10 **A.** Yes.

11 **Q.** And it costs 500 V-Bucks to do this; right?

12 **A.** I'm not sure of the exact cost, but, yes, I'll agree.

13 **Q.** Thank you.

14 All right, sir. Let's take a look now at *Creative*.

15 And, Your Honor, I -- we have before us -- let me ask you
16 first, Mr. Weissinger, do you recognize this as a screenshot
17 from Epic Games website?

18 **A.** Not off the top of my head, but if you got it from
19 fortnite.com, then I agree.

20 **Q.** Thank you. And you recognize this, don't you, as an
21 accurate description of the Creative Mode? Go ahead and take
22 a minute.

23 **A.** Thank you. Okay.

24 **Q.** And do you agree that this is an accurate description of
25 the Creative Mode set out on this document?

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1 **A.** In general, yes.

2 **Q.** Your Honor -- this is in your binder as DX5539, and I
3 would move for its admission.

4 **THE COURT:** Any objection?

5 **MS. MOSKOWITZ:** Your Honor, if I could just have one
6 moment, please.

7 I apologize. We were just checking on confidentiality
8 issues. I'm sorry for the delay.

9 **MR. DOREN:** I can represent to counsel it is the
10 public website.

11 **MS. MOSKOWITZ:** Yes. Oh, sorry. It was on the
12 screen. No objection, Your Honor.

13 **THE COURT:** Okay. It's admitted.

14 (Defense Exhibit 5539 received in evidence)

15 **MR. DOREN:** Thank you, Your Honor.

16 **Q.** And the description states, "The Creative allows you to
17 design *Fortnite* games and experiences that can be published
18 and shared with friends online, recreate *Fortnite* with your
19 own vision using your rules on your own personal island. You
20 can also play countless community-made games with your friends
21 by entering an island code or visiting the featured hub in
22 game."

23 Did I read that correctly?

24 **A.** Yes, sir.

25 **Q.** And do you agree with that statement?

WEISSINGER - CROSS - DOREN

1 **A.** In general, yes.

2 **Q.** And below that are some of the examples of featured
3 islands; correct?

4 **A.** Yes.

5 **Q.** And on the left we have something called "Space Adventure
6 Deathrun"; correct?

7 **A.** Yep.

8 **Q.** And on the right we have something called "Bird Cage
9 Deathrun"; correct?

10 **A.** Yes.

11 **Q.** And a "deathrun" is where the player has to make it across
12 the island without getting killed; correct?

13 **A.** Yeah. Think of it like a temple-run-type game. You're
14 kind of going down a path and there is obstacles --

15 **Q.** Kind of the run-or-die game?

16 **A.** Correct.

17 **Q.** Got it.

18 And so let's talk about the Create Mode. We have heard a
19 lot about that. And the Create Mode, as I understand it, is
20 where a player wants to create their own island. They want to
21 landscape their own island, if you will; correct?

22 **A.** Yeah. They have a whole host of creation tools that they
23 can use to build their own experience.

24 **Q.** So they get basically a big empty lot in the form of an
25 island, and then Epic has created features for them to place

WEISSINGER - CROSS - DOREN

1 there: Grass, mountains, structures, trees, that sort of
2 thing?

3 **A.** Yes. A whole set of props.

4 **Q.** Okay. Can we take a look at the Create Mode. Is what we
5 are looking at on the screen, an example of a player putting
6 together their island?

7 **A.** Yes.

8 **Q.** Okay. And what we're looking at is someone with a device,
9 and there they are projecting a tree, and that tree then takes
10 shape in the landscape; correct?

11 **A.** Yes.

12 **Q.** And now it looks like they're building a building;
13 correct?

14 **A.** Yes.

15 **Q.** Putting up a number of walls?

16 **A.** Yes.

17 **Q.** And then inside that building, they are now generating
18 what looks like a loot box; is that right?

19 **A.** Yes. They did a chest.

20 **Q.** Okay. "Loot" being L-O-O-T like pirate loot; correct?

21 **A.** Correct.

22 **Q.** And then within that box there are various things, in this
23 case, guns, for example; correct?

24 **A.** Yes.

25 **Q.** And players, after creating their island, can also create

WEISSINGER - CROSS - DOREN

1 games on their island; right?

2 **A.** Yes.

3 **Q.** And that's actually a thing; right? That's a big thing
4 like the Bird Cage Deathrun, that was a game created by a
5 player, a user; correct?

6 **A.** Correct.

7 **Q.** And then I believe the way we put it on the definition was
8 that these are community-made games that people then come and
9 play; am I right?

10 **A.** Games and experiences.

11 **Q.** Thank you.

12 And let's go back to Exhibit 5539, and the last line in
13 what is the Creative Mode paragraph talks about "visiting the
14 featured hub in-game." Do you see that?

15 **A.** Yes.

16 **Q.** Let's go to the featured hub in-game. Do you recognize
17 this on your screen, sir, as that hub?

18 **A.** Yes.

19 **Q.** And I'll describe for the record that our avatar is
20 standing in the middle of a round patio, if you will, and that
21 patio is surrounded by various layers or circles of walls,
22 each of which appears to contain a game title. Is that an
23 accurate description?

24 **A.** Yes.

25 **Q.** All right. And if we look over to the left, we have

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1 something called "Practice" and various games there; right?

2 **A.** Yes.

3 **Q.** And if we look to -- a little further to the right, we see
4 the combat area; correct?

5 **A.** Yes.

6 **Q.** And if we look further to the right, we have what's called
7 "Variety"; am I right?

8 **A.** It said "Highlights." We skipped one.

9 **Q.** Sorry. Thank you, sir. Let's do that.

10 To the right of "Combat" was "Highlights"; true?

11 **A.** Yes.

12 **Q.** And then to the right of that is "Variety"; correct?

13 **A.** Yes.

14 **Q.** I'm gathering we all know what combat is, so let's go over
15 to Variety and take a look.

16 And, sir, as I understand it, our avatar could enter any
17 of these islands through these doors; is that right?

18 **A.** That's correct.

19 **Q.** And here under "most popular," it's -- number two is
20 "prison breakout"; correct?

21 **A.** Yes.

22 **Q.** And it says, "Escape prison and cause mayhem in the city";
23 correct?

24 **A.** Yes.

25 **Q.** Or you can be a guard and keep everything under control;

WEISSINGER - CROSS - DOREN

1 correct?

2 **A.** Yes.

3 **Q.** Now, is this an experience or a game, sir?

4 **A.** That looks like a game to me.

5 **Q.** Okay. Okay.

6 And let's look at the most popular in the variety of
7 categories. It's called "Rockets vs. Cars." Do you see that?

8 **A.** Yes.

9 **Q.** And it says, "Just like the Classic Mode" -- if Wobbly

10 Cello will get out of our way, we can read the rest of this.

11 And it says, "Now with snipers." Do you see that?

12 **A.** Yes.

13 **Q.** And is the number one most popular game in the variety
14 category here "Cars Now With Snipers" -- is that a game or an
15 experience?

16 **A.** That looks like a game to me.

17 **Q.** Okay. Thank you, sir.

18 And let's head over now to highlights, and let's go to the
19 first door on the left in highlights. And I see that this one
20 is called "Creative Mayhem Regional Qualifier." Are you
21 familiar with that, sir?

22 **A.** Yes. That's a promotion that we're running currently to
23 have basically community influencers play games or other
24 content from community creators, and they invite their
25 community audience in, and they all play together, and they

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1 win prizes. That's Creative Mayhem.

2 **Q.** And there is a qualifying period for this tournament;
3 correct?

4 **A.** For this promotion, yes.

5 **Q.** And that qualifying period is from May 4th to about June
6 5th?

7 **A.** I'm not sure, but that sounds right. It was, I believe,
8 for the month of May.

9 **Q.** And once you qualify for this promotion, then you go into
10 a bracket tournament and someone wins; right?

11 **A.** Yes.

12 **Q.** And this promotion started on May 4th?

13 **A.** I believe it was around the month of May, but May 4th
14 sounds correct.

15 **Q.** And for this event, are you also in charge of marketing
16 and promotions?

17 **A.** Yes.

18 **Q.** And did you also create a trailer for your YouTube
19 channel?

20 **A.** We may have.

21 **Q.** Let's take a look, sir, and see if I can refresh your
22 recollection. And what I have here, sir, we're marking as
23 Exhibit 5544. And do you recognize this as the title page for
24 the *Fortnite* trailer for Creative Mayhem?

25 **A.** Yes.

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1 **Q.** And, in fact, you see that since -- you see that it's
2 dated May 4 in the lower left?

3 **A.** Yes.

4 **Q.** Does that refresh your recollection as to when this
5 launched?

6 **A.** Yes. Thank you.

7 **Q.** May 4th?

8 **A.** May 4th.

9 **Q.** The second day of this trial?

10 **A.** Yes.

11 **Q.** Okay. And since then, there have been over a half a
12 million views; correct?

13 **A.** Yes.

14 **Q.** And, once again, your goal here was to generate excitement
15 to attract people to the promotion; correct?

16 **A.** We had a bunch of new Creative Mode features that arrived
17 into the game recently, and this was to help celebrate those
18 new features.

19 **Q.** Excellent. Thank you.

20 So you also wanted to accurately reflect those new
21 features and what could be done in Creative Mode; correct?

22 **A.** Essentially there were new capabilities that were added to
23 Creative Mode recently that we wanted to highlight.

24 **Q.** All right.

25 Well, why don't we watch your trailer, which is Exhibit

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1 5544.

2 (Whereupon, the video was played.)

3 **THE COURT:** Our court reporter was relieved.

4 **MR. DOREN:** Absolutely, Your Honor.

5 **Q.** Mr. Weissinger, do you recognize Exhibit 5544 as the
6 trailer that was created to promote creative mayhem?

7 **A.** Yes.

8 **MR. DOREN:** And, Your Honor, I would ask to move into
9 evidence DX5544.

10 **THE COURT:** No objection.

11 **MS. MOSKOWITZ:** No objection.

12 **THE COURT:** Admitted.

13 (Defense Exhibit 5544 received in evidence)

14 **BY MR. DOREN:**

15 **Q.** Mr. Weissinger, if anyone were to state that Creative Mode
16 was solely for user creation, that would be untrue; correct?

17 **A.** That it was solely for user creation? Would you mind
18 repeating that question again? I'm just not sure what you are
19 asking for.

20 **Q.** Sure. Let me try it differently. Let me try it
21 differently.

22 If someone were to say that Creative Mode had no
23 competitive gameplay, that would be inaccurate; correct?

24 **A.** That would be inaccurate. There is competitive gameplay
25 in creative.

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1 Q. Thank you.

2 And one term I've learned in this case is something called
3 "game mechanics." Are you familiar with that term?

4 A. Sure. In general.

5 Q. In general. It's kind of a general term, isn't it?

6 A. Yes.

7 Q. It means in general that game mechanics specify how a game
8 will work for the people who play it; right?

9 A. Sure.

10 Q. And there are plenty of game mechanics in Creative Mode,
11 isn't there?

12 A. Yes, indeed.

13 Q. And if we could please look at DX5540. And, sir, you
14 have -- it's both in your binder and now on the screen in
15 front of you -- two Tweets from *Fortnite* Creative. Do you see
16 that?

17 A. Yes, sir.

18 Q. And are Tweets within your domain as vice-president of
19 marketing?

20 A. Yes. They fall under my group.

21 Q. And how often does Epic send out Tweets on *Fortnite*
22 generally?

23 A. Multiple times a day.

24 Q. And you mentioned, I believe, that you have about a
25 hundred million social media followers; is that correct?

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1 A. That is correct.

2 Q. And on the left, we see a Tweet from October 16, 2020;
3 correct?

4 A. Yes.

5 Q. And this is about *Fortnite* Creative; correct?

6 A. Yes.

7 Q. And this Tweet says that they combine gameplay mechanics
8 with exciting visual; correct?

9 A. Yes. It says they combine gameplay mechanics with
10 exciting visuals, but it's unclear as to what "they" is.

11 Q. Fair enough, sir.

12 Do you think that might be a reference to the game below,
13 *Overgrown Gunfight*?

14 A. Yes. It looks like it.

15 Q. And you intend when these Tweets go out to have them be
16 accurate; correct?

17 A. Yes.

18 Q. And on the right, there is a Tweet from Epic regarding
19 *Fortnite* Creative from August 25, 2020; correct?

20 A. Yes.

21 Q. And this Tweet says, "Drop into this action-packed *Battle*
22 *Royale* with 9 unique points of interest, custom terrain, and
23 fun gameplay mechanics"; correct?

24 A. Yes.

25 Q. And Epic intended that to be accurate when it was posted

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1 on August 25th, 2020; correct?

2 **A.** Yes.

3 **Q.** So if someone were to have said that there was nothing
4 resembling a game mechanic at all in *Fortnite* Creative, that
5 would be incorrect; true?

6 **A.** It depends on the experience, but, yes.

7 **Q.** If that person were to say that Creative is more like a
8 Barbie Fashion Designer but for the Fortnite universe, that
9 person would be incorrect; true?

10 **A.** Well, I'm not sure what goes on in Barbie Fashion
11 Designer, unfortunately.

12 **Q.** Fair enough. Can't say I do either.

13 But we can agree, sir, that there are game mechanics in
14 Creative Mode; correct?

15 **A.** Yes. Our tools have enabled game mechanics.

16 **Q.** The last element I want to talk with you about before we
17 move on to other things, which I intended to start with, are
18 in-app purchases. And we've heard a lot about buying V-Bucks
19 in this case. And I'd like to take you to a demonstrative
20 that shows what we think is the screen where one purchases
21 V-Bucks.

22 Do you recognize the demonstrative on the screen in front
23 of you?

24 **A.** Yes.

25 **Q.** And what this shows is under the heading of V-Bucks, four

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1 tiles; correct?

2 **A.** Yes.

3 **Q.** One for a thousand V-Bucks, then 2,800, 5,000, and 13,500;
4 correct?

5 **A.** Yes.

6 **Q.** And with real money, as we seem to call it in the *Fortnite*
7 world of 7.99, 19.99, 31.99, and 79.99 respectively; correct?

8 **A.** Yes.

9 **Q.** And then in the upper right-hand corner there is a number
10 5400. Did I read that right?

11 **A.** Yes.

12 **Q.** And I'll tell you, Mr. Spalding's 11-year-old son has been
13 quite pleased to have his account racking up V-Bucks while he
14 was preparing this slide.

15 And --

16 **MS. MOSKOWITZ:** Objection, Your Honor.

17 **THE COURT:** It's not a question.

18 **MR. DOREN:** I will put it in the form of a question,
19 Your Honor.

20 **Q.** Mr. Weissinger, let's go ahead and take a look at a
21 thousand V-Bucks, and let's click through that, please.

22 And take us to a screen entitled "Purchase." Do you see
23 that? Or it has a purchase button, should I say. Do you see
24 that?

25 **A.** Yes.

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1 Q. And so to purchase V-Bucks in *Fortnite*, one must click
2 through the amount they want. Then they come to this screen;
3 correct?

4 A. Yes.

5 Q. Then they hit "Purchase."

6 Let's go ahead and do that, Mr. Spalding.

7 And you're then redirected to the Epic Games Store
8 checkout counter; correct? This being a PC game that we're
9 playing today; correct?

10 A. Yes.

11 Q. And once there, there is credit card information already
12 entered, but before the purchase can be completed, it's
13 necessary to enter the CVV number from the back of that credit
14 card; correct?

15 A. Yes. It appears so.

16 Q. All right. And that's what is required here in the Epic
17 Games Store; true?

18 A. For this particular transaction, it looks like yes.

19 Q. And do you understand, sir, that that's also required on,
20 for example, the Nintendo switch when one purchases V-Bucks
21 there?

22 A. I'm not sure off the top of my head.

23 Q. And do you know whether or not that was required when one
24 purchased V-Bucks within iOS?

25 A. I'm not sure off the top of my head.

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1 **Q.** All right.

2 Now, let's talk about what one purchases with V-Bucks.

3 And, sir, that requires us to go to something called the

4 "Items Shop"; correct?

5 **A.** Yes.

6 **Q.** So one does not buy things -- skins, cosmetics -- while

7 playing; correct? One must step out and go into the Items

8 Shop; true?

9 **A.** Yes. I believe that's the case currently, yes.

10 **Q.** All right. And once here, if you have V-Bucks in your

11 account, you can spend until you're out of V-Bucks; correct?

12 **A.** Correct.

13 **Q.** In other words, if you start the day with V-Bucks in your

14 account and you want to go into the Items Shop to buy

15 something, you don't need to go buy V-Bucks anywhere. You can

16 spend those in your account; true?

17 **A.** Yes.

18 **Q.** Is there any limit on the number of V-Bucks one can have

19 in their account?

20 **A.** I'm not sure if there is a limit on the total amount that

21 you can have. There is a limit on the amount that you can

22 purchase.

23 **Q.** And what is that limit?

24 **A.** Off the top of my head, I -- I'm not remembering. I

25 believe there is a daily and maybe a weekly limit that caps

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1 spending inside the game.

2 **Q.** But it's a limit. You can play for quite a while without
3 having to purchase more V-Bucks; correct?

4 **A.** You don't have to purchase any V-Bucks to play.

5 **Q.** Fair enough. Fair enough.

6 And so -- but the limit on V-Bucks again, that can be
7 spent over the course of time until those V-Bucks are
8 exhausted; true?

9 **A.** Yes.

10 **Q.** And as we scroll down through the Items Shop, first of all
11 we see a clock there next to "Featured." It has 7:40 next to
12 it. These features rotate out in 7 hours and 40 minutes from
13 now; correct?

14 **A.** Correct.

15 **Q.** So if you come back at 5:00 tonight, this will look
16 different; right?

17 **A.** Yes.

18 **Q.** And then as we scroll down, we see different packs, we see
19 different skins, we see different tools, and we see different
20 prices; true?

21 **A.** Yes.

22 **Q.** All right. Thank you, sir. I appreciate the tutorial and
23 the tour.

24 And, Your Honor, first of all I want to make sure I
25 remember to move DX5540 into evidence, which are the Tweets.

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1 **THE COURT:** No objection?

2 **MS. MOSKOWITZ:** No objection, Your Honor.

3 **THE COURT:** Admitted.

4 (Defense Exhibit 5540 received in evidence).

5 **MR. DOREN:** Thank you, Your Honor.

6 **Q.** Mr. Weissinger, as part of your job, you need to know your
7 customer base; correct?

8 **A.** Yes.

9 **Q.** And as you've already told the Court, you have data that
10 helps you figure out the nature of your customer base;
11 correct?

12 **A.** Yes.

13 **Q.** And it's important for you to understand who it is you're
14 marketing to so that you can market effectively; true?

15 **A.** Yes.

16 **Q.** For example, one of the problems that you say -- or one of
17 the weaknesses you said of promotions within the iOS
18 environment is that a lot of people on that iOS platform
19 simply aren't looking for games; correct?

20 **A.** Going through the App Store environment.

21 **Q.** Thank you. I appreciate the clarification.

22 So within the App Store environment, many people simply
23 aren't looking for games; correct?

24 **A.** I believe that to be correct.

25 **Q.** And so you're looking for people that want to play games;

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1 right?

2 **A.** I'm looking for people who want awesome entertainment
3 experiences.

4 **Q.** And that's one of the reasons why you said that your
5 marketing with Xbox and PlayStation is more effective because
6 that's a game-specific audience; true?

7 **A.** Because the people there are automatically qualified as
8 looking for awesome entertainment experiences.

9 **Q.** Meaning they are going there to play games, ultimately
10 qualified. They are going there to play games?

11 **A.** I don't know. People use their Xbox and PlayStation to
12 play DVDs, and there is other apps on their stores that they
13 can install. They watch Hulu and stream other stuff, I
14 believe.

15 **Q.** Okay. Okay. Thank you, sir.

16 What percentage of *Fortnite* players currently are male?

17 **A.** I actually don't know.

18 **Q.** You have no ballpark?

19 **A.** I would assume more male than female.

20 **Q.** And what percentage of *Fortnite* players are under the age
21 of 18?

22 **A.** I do not know.

23 **Q.** You have no ballpark on that?

24 **A.** I do not.

25 **Q.** Sir, I would ask you to please look -- and how is that,

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1 sir? How is that, as the vice-president of marketing for
2 *Fortnite*, you have no idea what percentage of your users are
3 under the age of 18?

4 **MS. MOSKOWITZ:** Objection. Argumentive.

5 **THE COURT:** Overruled.

6 **THE WITNESS:** In general, we don't collect age
7 information on our players.

8 **BY MR. DOREN:**

9 **Q.** You know, though -- to use your term before -- anecdotally
10 that your audience is primarily young boys, right, 13 to 17
11 years old?

12 **A.** I do not know where exactly that bell curve fits. It
13 could be 18 to 24 also.

14 **Q.** Okay. So if we were to say that your kind of core
15 demographic are boys to men from 13 to 25, would you agree
16 with that statement?

17 **A.** Yes, I would.

18 **Q.** Thank you, sir.

19 If I could please ask you to look in your binder at
20 Exhibit 3233.

21 **A.** I might need another binder.

22 **Q.** Oh, I'm sorry. I have it here.

23 May I approach, Your Honor?

24 **THE COURT:** You may.
25

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1 **BY MR. DOREN:**

2 **Q.** Now, Mr. Weissinger, with the binder in front of you,
3 could you please turn to DX3233. Do you have that in front of
4 you, sir?

5 **A.** Yes, sir.

6 **Q.** And this is a document entitled "Fortnite North America
7 Publishing Update April 2019"; correct?

8 **A.** Yes.

9 **Q.** And have you seen documents like this in the course of
10 your work at Epic?

11 **A.** Yes.

12 **Q.** And I'd ask you, sir, to turn -- let's start, please, with
13 DX3233.003 and specifically -- and that is a page entitled
14 "Fortnite 2018 By the Numbers"; correct?

15 **A.** Yes.

16 **Q.** And in -- under November, which is the second entry in the
17 right-hand column from the top, do you see that? "NFL
18 Outfits" specifically?

19 **A.** Yes.

20 **Q.** And Epic entered into a promotion with the NFL; correct?

21 **A.** Yes.

22 **Q.** And it gave people the opportunity to wear NFL outfits
23 from their favorite player, for example; correct?

24 **A.** For the favorite team.

25 **Q.** Fair enough. Fair enough.

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1 And we won't get into player likeness issues.

2 And that gives Epic an opportunity to monetize those
3 images by selling those skins and cosmetics to players;
4 correct?

5 **MS. MOSKOWITZ:** Objection to the preamble.

6 **THE COURT:** Which preamble?

7 **MS. MOSKOWITZ:** The player likeness issues.

8 **THE COURT:** Okay. Well, that particular line is
9 stricken.

10 Can you answer the question?

11 **THE WITNESS:** I'm sorry. Would you mind repeating
12 the question?

13 **MR. DOREN:** I wouldn't at all. I will leave the
14 preamble out this time, sir.

15 **Q.** And Epic has the opportunity to monetize the sales of NFL
16 team likenesses; correct?

17 **A.** Yes.

18 **Q.** Here in fact by the time of this report in April 2019,
19 3.3 -- well, I'll take that back. 3.3 million units were sold
20 of NFL outfits in 2018; correct?

21 **A.** Yes. It looks like that based on this slide. I cannot a
22 hundred percent confirm.

23 **Q.** Sure. But you would expect a presentation on an update on
24 North America Publishing to be accurate within Epic; correct?

25 **A.** That's why I said it looks to be accurate.

WEISSINGER - CROSS - DOREN

1 Q. Thank you.

2 And these 3.3 million units would have been sold during
3 the months of November and December; correct?

4 A. That sounds correct based on the timing that I remember
5 for the availability of those NFL outfits.

6 Q. Thank you.

7 Please turn to page 00.6. And, sir, on the left, you see
8 the category of Top 20 Youth Brands; correct?

9 A. Yes.

10 Q. And on the right, you see Top 10 Monthly Expenditures for
11 People 18 to 24 years old and 13 to 17 years old; correct?

12 A. Yes.

13 Q. And this data is being put forward because as we've
14 discussed, 13- to 24-year-olds are the core demographic for
15 *Fortnite*; correct?

16 A. It is 13 to 24, yes, is interesting as a core demographic,
17 primary demographic for us.

18 Q. And in the lower left, we have a box that says splurges
19 they don't regret; correct? Same page, .006, do you see it?

20 A. Yes.

21 Q. For 13- to 17-year-olds, the first splurges they don't
22 regret is food; correct?

23 A. Yes.

24 Q. And the second is video games; right?

25 A. Yes. It looks like it.

WEISSINGER - CROSS - DOREN

1 **Q.** And for the 18- to 24-year-olds, the fifth splurge they
2 don't regret is video games; correct?

3 **A.** Correct. That's what it looks like based on the report,
4 but I'm not sure where the report comes from.

5 **Q.** Sure. But this was important enough for it to be
6 published in this deck within Epic; correct?

7 **A.** For this particular update it is included.

8 **Q.** And the Top 5 list for those over 25 does not include
9 video games, does it?

10 **A.** Based on this "splurges they don't regret" question, yes.

11 **Q.** And then please look at page .007. "Influencers are
12 important for teens." That is the heading of this slide;
13 correct?

14 **A.** Yes.

15 **Q.** And there is a table that says who are they following. Do
16 you see that?

17 **A.** Yes.

18 **Q.** And for those 13 to 17, 92 percent of them follow friends;
19 correct?

20 **A.** Yes.

21 **Q.** 78 percent of them follow family; correct?

22 **A.** Yes.

23 **Q.** And 63 percent of them in third place in this ranking
24 follow online celebrities and creators; right?

25 **A.** Yes.

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1 Q. That means they follow gamers; right?

2 A. No.

3 Q. Well, they follow creators; correct?

4 A. I take creators to mean content creators like it could be
5 an Instagram personality, it could be a TikTok person.

6 Q. It could be the guys in the box playing games and
7 screaming into the microphone that we saw on the trailer;
8 true?

9 A. They are a subset of celebrities and creators.

10 Q. And these days, online celebrities and creators are way
11 ahead of athletes, for example, in terms of the people that
12 13- to 17-year-olds follow; correct?

13 A. I have no idea. I think the top Instagram people are like
14 The Rock, Ariana Grande.

15 Q. Well, sir, I direct you back to this Epic internal deck
16 where the second entry from the bottom rather than the third
17 from the top is athletes; correct?

18 A. I see athletes.

19 Q. And then, sir, if you would please turn to page .008, and
20 to keep this easy for us to stay on the same line, let's look
21 to the red bracketed information for June 2018. All right?

22 A. Yep.

23 Q. And do you see, sir, that in June 2018, 79 percent of
24 *Fortnite* players were male; correct?

25 A. I don't think that's what this chart is saying. These are

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1 not *Fortnite* player ages and male/female breakdowns.

2 **Q.** What is this chart showing, sir?

3 **A.** My recollection is that this is YouTube viewership of
4 *Fortnite* content.

5 **Q.** All right. So these are -- these are statistics for the
6 people who went to the YouTube channel for *Fortnite* and
7 watched that content; correct?

8 **A.** I believe so. It was a long time ago, though, so I'm not
9 exactly certain, but that's my recollection.

10 **Q.** All right. Well, based on your recollection here, sir, 79
11 percent of those that watched *Fortnite* content on YouTube are
12 male, correct, in June 2019?

13 **A.** Yes.

14 **Q.** And 57 percent of those were under -- were 24 or younger;
15 correct?

16 **A.** Yep.

17 **Q.** And 21 percent of those who went to *Fortnite* content on
18 YouTube were female; correct?

19 **A.** Yes. I believe so, based on this.

20 **Q.** Thank you for helping us decode this, sir.

21 **A.** Uh-huh.

22 **Q.** Mr. Weissinger, prior to August 2020, you had never heard
23 anybody at Epic say that if not for Apple's 30 percent
24 commission, Epic could have captured more iOS users; correct?

25 **A.** Yes. That wouldn't have been the conversation that I

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1 would have been involved in.

2 **Q.** And you have never heard anybody at Epic say that it could
3 have retained more iOS users if not for Apple's 30 percent
4 commission; correct?

5 **A.** Yes, but that's not to say those conversations didn't take
6 place. It's just a conversation that I wasn't in.

7 **Q.** But you're speculating, sir, that they might have but you
8 weren't present; correct?

9 **A.** That's correct.

10 **Q.** We've got a lot of "yeses" and "nos" flying here so let me
11 make sure the record is clear.

12 You, sir, have never been party to a conversation with
13 anybody at Epic where it was said that Epic could have
14 retained more iOS users if not for Apple's 30 percent
15 commission; is that correct?

16 **A.** Yes. Not that I can recollect.

17 **Q.** And within *Fortnite* or at Epic regarding *Fortnite*, are you
18 familiar with the term "conversion," "converting a player"?

19 **A.** Yes.

20 **Q.** And that is when someone who has been playing for free and
21 has not purchased any V-Bucks becomes a paying player;
22 correct? They buy V-Bucks?

23 **A.** Yes.

24 **Q.** And in your marketing efforts at Epic, you have never
25 heard anybody say that Epic could convert more iOS users if it

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1 wasn't for Apple's 30 percent commission; correct?

2 **A.** I believe I referenced in the deposition that there were
3 conversations around increased purchase velocity related to
4 lower price points.

5 **Q.** You are referring now to the impact of the mega drop in
6 your communication strategy for the console manufacturers;
7 correct?

8 **A.** Just in general. I'm not sure exactly where or what in my
9 deposition you are referring to.

10 **MR. DOREN:** Your Honor, page 142, lines 7 to 12.

11 **THE COURT:** Go ahead.

12 **BY MR. DOREN:**

13 **Q.** Reading from your deposition, Mr. Weissinger, at page 142,
14 lines 7:

15 "Q. In your marketing efforts at Epic" --

16 **A.** I'm sorry. Can I read along?

17 **THE COURT:** He gets to read this. Do you need the
18 page?

19 **THE WITNESS:** Yes. I'm sorry.

20 **THE COURT:** 142 is the page.

21 **MR. DOREN:** Let me know when you are there, sir.

22 **THE WITNESS:** It was DX --

23 **THE COURT:** 142, line 7. He is going to read that.

24 **THE WITNESS:** I'm in the wrong one. I'm sorry.

25 **MR. DOREN:** Your Honor, while we are waiting, I would

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1 move to admit DX3233.

2 **THE COURT:** No objection?

3 **MS. MOSKOWITZ:** No objection, Your Honor.

4 **THE COURT:** Admitted.

5 (Defense Exhibit 3233 received in evidence)

6 **BY MR. DOREN:**

7 **Q.** Mr. Weissinger, do you now have your deposition open in
8 front of you?

9 **A.** Yes.

10 **Q.** I will now read from page 142, lines 7 to 12:

11 "Q. In your marketing efforts at Epic, have you ever heard
12 anybody say that we can capture more iOS new users but for
13 Apple's 30 percent commission?

14 "A. I am not aware of discussions taking place regarding
15 that."

16 Mr. Weissinger, as the VP of marketing at Epic, you have
17 never discussed whether your marketing efforts would be more
18 effective or successful if Epic could distribute iOS apps
19 outside of the App Store, have you? Mr. Weissinger?

20 **A.** I was just reading some of the context around it. I'm
21 sorry.

22 **Q.** Mr. Weissinger, the question pending is as the VP, the
23 vice-president of marketing at Epic, you have never discussed
24 whether your marketing efforts would be more effective or
25 successful if Epic could distribute iOS apps outside of the

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1 App Store; correct?

2 **A.** Yes. I am not aware of --

3 **Q.** Sir, I'm not asking you to read your deposition. I'm
4 asking you to answer me here under oath today before God.

5 Now, as the vice-president of marketing at Epic, you have
6 never discussed whether your marketing efforts would be more
7 effective or successful if Epic could distribute iOS apps
8 outside of the App Store; correct?

9 **A.** Correct.

10 **Q.** All right, sir.

11 Let's turn briefly to marketing. You agree that Apple has
12 promoted *Fortnite* season launches; correct?

13 **A.** Yes.

14 **Q.** And season launches occur about once a quarter; is that
15 right?

16 **A.** Yes. About every 10 weeks.

17 **Q.** In *Fortnite* parlance, there are chapters and then there
18 are seasons within the chapters; right?

19 **A.** Yes.

20 **Q.** And we are in the second chapter of *Fortnite* at this point
21 in its life?

22 **A.** That's correct.

23 **Q.** And as part of those promotions, Apple would provide App
24 Store banners; correct?

25 **A.** Yes.

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1 **Q.** And it would feature *Fortnite* on the game tab; correct?

2 **A.** Correct.

3 **Q.** And it would post to social media platforms; correct?

4 **A.** Correct.

5 **Q.** And it would take out paid ads as well; true?

6 **A.** Yes. I believe so.

7 **Q.** And it would write editorial features within the App Store
8 regarding *Fortnite*; right?

9 **A.** Yes.

10 **Q.** Now, one of the things you said is that the area for
11 growth -- the area for growth is -- for *Fortnite* is among
12 mobile phones, correct, mobile platforms?

13 **A.** Yes.

14 **Q.** And we have heard that there are many hundreds of millions
15 of people who own currently own iPhones. And is that your
16 general understanding, sir?

17 **A.** Yes. I believe over a billion.

18 **Q.** And if each of these promotions were made on the App Store
19 on those iOS devices, they could be viewed by all those
20 hundreds of millions of people; correct?

21 **A.** If they're going through the App Store.

22 **Q.** If they had any interest in games; right?

23 **A.** If they had interest in the entertainment experiences.

24 **Q.** And, sir, Apple has provided Epic with what's called an
25 "App Store takeover"; correct?

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1 **A.** Yes.

2 **Q.** And I'd ask you, please, sir, to look at Exhibit DX3457.

3 Do you have that document in front of you, sir?

4 **A.** Yes. 3457?

5 **Q.** Yes, sir.

6 **A.** Yes.

7 **Q.** And it's from Mr. Malik, and that's how he pronounces his
8 name; correct?

9 **A.** I think it's "Ma-Leek."

10 **Q.** I did, too, until I deposed him today, sir. So I'm happy
11 to go with "Ma-Leek" here today.

12 It's from Mr. Haseeb Malik to you and others?

13 **A.** Correct.

14 **Q.** On September 27, 2019; correct?

15 **A.** Yes.

16 **Q.** And Mr. Malik reports "Exciting news. After negotiating
17 with Apple, we have secured the opportunity to take over the
18 App Store on the release of Chapter 2. Epic will be the first
19 to take over the latest iteration of the App Store. We will
20 also be given creative control on what we want to display and
21 how."

22 Did I read that accurately?

23 **A.** Yes.

24 **Q.** And you understood that "the first to take over the latest
25 iteration" is a reference to the first since the 2017 redesign

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1 of the App Store; correct?

2 **A.** I am not sure.

3 **Q.** All right. And then under a summary of what is being
4 offered, it goes through various postings and banners and the
5 like; correct?

6 **A.** Yes.

7 **Q.** And it states that, "This takeover will remain in place
8 from the 15th to the 24th"; correct? About 10 days?

9 **A.** Yes.

10 **Q.** And that in fact occurred, didn't it?

11 **A.** There was some takeover. I'm not sure of the exact timing
12 and what was actually delivered.

13 **Q.** You don't doubt that it occurred, though, do you, sir?

14 **A.** No. There was support.

15 **MR. DOREN:** Your Honor, I would move into evidence
16 3457.

17 **THE COURT:** Any objection?

18 **MS. MOSKOWITZ:** No objection.

19 **THE COURT:** No objection?

20 **MS. MOSKOWITZ:** No objection, Your Honor.

21 **THE COURT:** Admitted.

22 (Defense Exhibit 3457 received in evidence)

23 **BY MR. DOREN:**

24 **Q.** You talked about concerts and in fact Apple helped to
25 promote concerts hosted in *Fortnite*; correct?

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1 A. Yes.

2 Q. It helped to promote the Marshmello concert; right?

3 A. Yes.

4 Q. And the Travis Scott concert; true?

5 A. Yes.

6 Q. And the Kenshi Yonezu concert; right?

7 A. I believe so.

8 Q. And Apple provided the same sort of marketing support for
9 those concerts that it would for a season launch; am I right?

10 A. I'm not sure without looking at it, but I believe for
11 Marshmello and for Travis Scott, at least it was probably at
12 the same level of the season launch.

13 Q. And you've already commented that Apple Music was brought
14 in to promote the playlist for both Marshmello and Travis
15 Scott after their concerts; correct?

16 A. Yes.

17 Q. And, in fact, for Marshmello, Apple promoted the *Fortnite*
18 playlist on a billboard in Times Square in New York City;
19 true?

20 A. Yes, they did.

21 Q. Would you please look at Exhibit DX3222 and the second
22 page of that exhibit, sir. And is that a photograph of the
23 Times Square billboard?

24 A. It looks like it, yep.

25 Q. With a reference to the Marshmello extended *Fortnite* set;

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1 correct?

2 **A.** Yes. A little bit smaller than Apple Music and the Apple
3 Music App.

4 **Q.** And yet prominent; correct?

5 **A.** I wouldn't say it's a primary read.

6 **Q.** All right, sir.

7 And in the middle of that, we have in fact the *Fortnite*
8 Marshmello avatar; correct?

9 **A.** Yep.

10 **MR. DOREN:** Your Honor, I would move to admit Exhibit
11 3222.

12 **THE COURT:** No objection?

13 **MS. MOSKOWITZ:** No objection.

14 **THE COURT:** Admitted.

15 (Defense Exhibit 3222 received in evidence)

16 **BY MR. DOREN:**

17 **Q.** Sir, these concerts, they last about 15 minutes; correct?

18 **A.** Yeah. Roughly 10 to 15 minutes.

19 **Q.** Ten to 15 minutes. The artists are avatars; am I right?

20 **A.** They're digital representations of themselves, yes.

21 **Q.** And the music is recorded; true?

22 **A.** There was some live element to the Marshmello performance
23 where his voice was coming in live to the game.

24 **Q.** But otherwise, this is recorded music; correct?

25 **A.** Yes. It is recorded and sequenced in advance.

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1 Q. And you mentioned how many millions of people attended,
2 for example, the Marshmello concert. Do you remember that
3 generally, that testimony?

4 A. I believe I referenced a number for Travis Scott. I'm not
5 sure if I referenced one for Marshmello.

6 Q. Thank you, sir.

7 And what was that number?

8 A. There were 12.3 million concurrents for Travis Scott.

9 Q. That is give or take 3 percent of *Fortnite* accountholders;
10 true? Maybe a little less?

11 A. If you're starting from 400 million, then it sounds
12 roughly correct. Those were also concurrents so everyone
13 logged in at once.

14 Q. By the way, speaking of that, *Fortnite* can only
15 accommodate -- any one game can only accommodate a hundred
16 people; correct?

17 A. Yes. I believe that's the cap of the limits that we've
18 had.

19 Q. So these 12 million people were in groups of 100 in
20 different *Fortnite* experiences; correct?

21 A. Correct. They were instances of the same thing playing at
22 once.

23 Q. So lots and lots of groups of 100 or less; right?

24 A. Correct.

25 Q. And during the Marshmello concert, people couldn't shoot

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1 each other; right?

2 A. Weapons were disabled.

3 Q. During the concert; correct?

4 A. Yes.

5 Q. During the Marshmello concert and the Travis Scott
6 concert; right?

7 A. Yes. I believe so.

8 Q. All right. But they weren't disabled until the concert
9 began, were they?

10 A. I'm not sure about the Travis Scott playlist, if that one
11 was disabled the whole time, but my recollection is probably
12 that they were disabled at some point in the lead-up to the
13 concert or when the concert began.

14 Q. But until then, sir, these hundred people were shooting
15 each other before the concert began, weren't they?

16 A. They were -- they were just, yeah, playing *Fortnite*.

17 Q. And playing *Fortnite*, shooting each other, right, or
18 clubbing each other or shooting arrows into each other; right?

19 A. It was in the *Battle Royale* map, so the experience that
20 they started in was reflective of *Battle Royale* mode.

21 Q. And that would add to their lifetime score in the game;
22 correct?

23 A. Yes. And there's --

24 Q. In your -- I'm sorry, sir. Are you done?

25 A. Yes.

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1 Q. You're familiar with the publication *The Verge*?

2 A. Yes.

3 Q. And what is *The Verge*?

4 A. It's kind of an entertainment tech trade line.

5 Q. For digital games?

6 A. I'm not sure if they're focused only on games, but --

7 Q. Digital content?

8 A. They cover games.

9 Q. Thank you.

10 And do you recall, sir, that after the -- after the Travis
11 Scott concert, *The Verge* reported that as with past events,
12 the preshow was a bloodbath with players killing each other to
13 kill some time?

14 A. I'm not familiar with that.

15 Q. That doesn't surprise you, though, does it?

16 A. It does because there is no blood in *Fortnite*.

17 Q. Got it. Otherwise. But for the bloodless nature of the
18 killing, that doesn't surprise you; correct?

19 A. There is no killing. There is eliminations.

20 Q. Eliminations, did you say?

21 A. Uh-huh.

22 Q. Got it.

23 **THE COURT:** Is there a difference?

24 **THE WITNESS:** You teleport out and you warp out, and
25 it plays into the fiction of *Fortnite*. So when you are

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1 eliminated, you kind of digitally kind of fragment and
2 disappear.

3 **THE COURT:** Okay.

4 **BY MR. DOREN:**

5 **Q.** And, Mr. Weissinger, you talked about a leak of the
6 Marshmello playlist by Apple. Do you recall that?

7 **A.** Yes.

8 **Q.** And that leak occurred a few hours before the concert;
9 correct?

10 **A.** I believe so.

11 **Q.** Not weeks before; correct?

12 **A.** I believe so.

13 **Q.** You believe I'm correct?

14 **A.** Yes. I believe you're correct.

15 **Q.** And the -- it was the playlist, right, not the music
16 itself, not that recorded soundtrack?

17 **A.** I think it was a playlist and a text description was
18 associated with that playlist.

19 **Q.** And, in fact, within Epic, Epic had a leak of its own
20 related to the Marshmello concert; correct?

21 **A.** I cannot remember.

22 **Q.** Well, do you remember that a few days before the concert,
23 Epic distributed the soundtrack to various platform owners?
24 That would have been the timing; right?

25 **A.** Soundtrack to various platform owners? I can't recollect

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1 that.

2 **Q.** Well, do you recall that when console users hit "replay"
3 on *Fortnite* on January 30th, they could play the entire
4 concert on their console?

5 **A.** I don't recollect that.

6 **Q.** Let's take a look, please, sir, at Exhibit 3254. Sir, do
7 you have that exhibit in front of you?

8 **A.** Yes, I do.

9 **Q.** And do you recognize this as an internal Epic email from
10 Mr. Sozio to various of your colleagues, including Tim Sweeney
11 at the bottom?

12 **A.** Yes.

13 **Q.** And do you see that it's regarding "Re Concert Music
14 Leak"?

15 **A.** Yes.

16 **MR. DOREN:** Your Honor, I move to admit DX3254.

17 **THE COURT:** No objection?

18 **MS. MOSKOWITZ:** Mr. Weissinger is not on this email
19 chain.

20 **THE COURT:** Are you claiming this is not a business
21 record of Epic's?

22 **MS. MOSKOWITZ:** No, Your Honor. Just on the
23 sponsoring witness.

24 **THE COURT:** Is this a business record or not? What's
25 the objection?

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1 **MS. MOSKOWITZ:** Sponsoring witness.

2 **THE COURT:** Overruled. It's admitted.

3 (Defense Exhibit 3254 received in evidence)

4 **BY MR. DOREN:**

5 **Q.** Mr. Weissinger, do you see at the bottom of the CC box,
6 there is Mr. Sweeney; correct?

7 **A.** Yes.

8 **Q.** There is also an entry for an email address -- and
9 apologies in advance to the Court -- for shithappens@epic.com;
10 correct?

11 **A.** Yes.

12 **Q.** What is that?

13 **A.** It's an internal live ops escalation alias.

14 **Q.** So, in other words, wherein a problem comes up, that
15 distribution list receives notifications and communication;
16 correct?

17 **A.** That's correct.

18 **Q.** That -- I presume that that name is tongue and cheek?

19 **A.** I'm not sure of the original genesis of that name, but
20 it's used for live ops -- in general, live ops escalations.

21 **Q.** Do you think it means that Epic takes those issues less
22 seriously than if it had another name?

23 **A.** No. Those are serious issues.

24 **Q.** I would direct your attention to .005 on this document.

25 And do you see, sir, the email from Dom Acquarulo at the

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1 bottom of that page?

2 **A.** Yes.

3 **Q.** "Hey all for awareness, players have managed to get the
4 concert set to play using replays"; correct? Do you see that?

5 **A.** Yes.

6 **Q.** Immediately above that is a note from Mr. Sweeney, right
7 which, begins "Christ." Do you see that?

8 **A.** Yes.

9 **Q.** "What happened to our plans to encrypt content? Can we
10 not put relevant content into asset packages and encrypt them
11 together with music"? That's what Mr. Sweeney said; right?

12 **A.** Yes.

13 **Q.** If you look over, please, in the middle of page .004,
14 Mr. Vogel, Mr. Vogel is the chief operating officer; correct?

15 **A.** I don't think he would have been at the time but he is
16 now.

17 **Q.** And Mr. Vogel wrote, "Video is encrypted on untrusted
18 clients -- PC, Mac, iOS, Android -- but not on consoles.

19 There is some sort of bug in replays that triggers the
20 sequence which on console will play the music." Did I read
21 that accurately?

22 **A.** Yes.

23 **Q.** And, by the way, sir, it appears from this note that when
24 Epic has data that it wants to make sure is protected and it's
25 putting it on a mobile device, it takes extra steps to secure

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1 it; right?

2 **A.** I am not involved in the encryption process so I'm not
3 sure.

4 **Q.** Mr. Weissinger, it's a fact, isn't it, that every partner
5 of Epic's has leaked a *Fortnite* season at some point?

6 **A.** I wouldn't be surprised.

7 **Q.** Sony has; right?

8 **A.** Yes.

9 **Q.** And Microsoft has; correct?

10 **A.** Yes.

11 **Q.** And Nintendo has; true?

12 **A.** Yes.

13 **Q.** And Tencent has; right?

14 **A.** Correct.

15 **Q.** The company that owns 40 percent of Epic; correct?

16 **A.** Correct.

17 **Q.** And Samsung has leaked a season as well; correct?

18 **A.** I can't recollect.

19 **Q.** It's leaked skins, hasn't it?

20 **A.** I can't recollect.

21 **Q.** All right, sir.

22 And, in fact, as recently as July 16, you stated that
23 relative to others, you personally had great confidence in
24 Apple's ability to keep Epic secrets, didn't you?

25 **A.** When --

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1 **Q.** July 2020, two or three weeks before the hotfix was put in
2 place, sir, you stated that you personally had great
3 confidence in Apple's ability to keep Epic's secrets, didn't
4 you?

5 **A.** I'm not sure. I need to see or understand the context.

6 **Q.** Understood, sir.

7 Let's take a look at 5537.

8 Actually, Your Honor, I'm sorry. That's the incorrect
9 number. Look's at 5542.

10 Sir, Exhibit 5542 is an email to you to Hans Stolfus at
11 the top of that page; correct?

12 **A.** Yes.

13 **Q.** And the bottom half of this email is from Hans Stolfus
14 talking about the possibility of getting marketing support
15 from Google for *Fortnite's* launch of the Marvel season;
16 correct?

17 **A.** I'm sorry. I'm just reading to refresh.

18 **Q.** No worries.

19 **A.** Would you mind stating that once more?

20 **Q.** Let's look down at the July 15, 2020, email from Hans
21 Stolfus. Do you see that?

22 **A.** Yes.

23 **Q.** And that's talking about a meeting regarding marketing
24 opportunities with Google; correct?

25 **A.** Okay. I'm --

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1 **Q.** Sir, he states, "If all is successful, we should be able
2 to get ahead of the Marvel launch and acquire full marketing
3 support." Do you see that?

4 **A.** Yes.

5 **Q.** And then he says, "if Project Liberty doesn't affect our
6 position and relationship of course." He is referring to the
7 relationship with Google there; correct?

8 **A.** Yes.

9 **Q.** And then in your email at the top of this, you say, "I
10 know Apple can keep secrets. I'm not as sure about Google";
11 correct?

12 **A.** Yes. I write that.

13 **Q.** And you wrote that on July 16, 2020; correct?

14 **A.** Yes, I did.

15 **Q.** And that was after the various leaks that you talked
16 about; correct?

17 **A.** Yes, it was.

18 **Q.** And, sir, you became aware of what became known as Project
19 Liberty as early as 2019; correct?

20 **A.** I am not sure of the timing of when I first --

21 **MR. DOREN:** Your Honor, I would move to admit DX5542.

22 **THE COURT:** No objection.

23 **MS. MOSKOWITZ:** No objection, Your Honor.

24 **THE COURT:** Admitted.

25 (Defense Exhibit 5542 received in evidence)

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1 **BY MR. DOREN:**

2 **Q.** Sir, if you could please take a look at DX3069.

3 And, Your Honor, this was already admitted through the
4 testimony of Mr. Malik.

5 Sir, do you have Exhibit 3069 in front of you?

6 **THE COURT:** Mr. Doren, do you mean the deposition?

7 **MR. DOREN:** The deposition destinations in the four
8 hours that the Court accepted and then the parties stipulated
9 to the admission of various exhibits to those depositions and
10 Your Honor granted that stipulation on the first day of trial.

11 **THE COURT:** I didn't have this --

12 **MR. DOREN:** It is in your binder, Your Honor.

13 **THE COURT:** Right. But I didn't -- 3069. I thought
14 you said 29.

15 **MR. DOREN:** I apologize. I apologize. My mouth is a
16 little dry.

17 **THE COURT:** It is admitted. Go ahead.

18 **MR. DOREN:** Thank you, Your Honor.

19 **Q.** Mr. Weissinger, do you have that exhibit in front of you,
20 Exhibiter 3069?

21 **A.** Yes, I do.

22 **Q.** And if you could please look at the last page, the email
23 dated September 24, 2019, from Alex Shobin. Do you see that?

24 **A.** Yes, I do.

25 **Q.** And Mr. Shobin was employed in the mobile area for Epic

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1 regarding mobile publishing; correct?

2 **A.** That's correct.

3 **Q.** And Mr. Shobin writes on September 24, 2019, "Do you know
4 how long it would take to make a build of *Fortnite* that could
5 function on Google Play but only support our existing payment
6 methods? How would that user flow differ compared to normal
7 Google Play apps." Did I read that correctly?

8 **A.** Yes.

9 **Q.** And "our existing payment methods" is a reference to
10 Epic's existing payment methods; correct?

11 **A.** I'm not sure, but, yes, I would -- that would be my
12 assumption reading this.

13 **Q.** And Mr. Shobin then goes on for context, "Store Team" --
14 and by the way, "Store Team" -- the store is the Epic Games
15 Store; correct?

16 **A.** It looks like it reading this.

17 **Q.** And that is a store run by Mr. Allison; correct?

18 **A.** Yes. Steve Allison.

19 **Q.** Right.

20 So Mr. Shobin says on September 24, 2019 -- he says for
21 context, "Store Team was briefing Tim" -- is that Mr. Sweeney?

22 **A.** Yes. I would assume so.

23 **Q.** -- "on the changes to the Android installer needed to
24 support more games. He asked them to scope out what it would
25 take to make the build I described above (it gets around their

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1 30 percent revshare cut)."

2 Did I read that accurately?

3 **A.** Yes.

4 **Q.** So you understand that by September 24, 2019,
5 Mr. Allison's Store Team had been brought -- read in, if you
6 will, to efforts to get around the 30 percent revshare cut;
7 correct?

8 **MS. MOSKOWITZ:** Objection. Mischaracterizes.

9 **THE COURT:** Sustained as to the form.

10 **BY MR. DOREN:**

11 **Q.** Mr. Weissinger, you would agree that as of September 4,
12 2019, the Store Team had been discussing ways to get around
13 the 30 percent revshare cut with Mr. Sweeney; correct?

14 **A.** It looks like there are discussions related to that here,
15 yes.

16 **Q.** Thank you.

17 And at the top of the page .002 there is a September 28,
18 2019, email from Mr. Malik. Do you see that?

19 **A.** Yes.

20 **Q.** And he says, "Resurfacing this to the top of your
21 respective inboxes," and then two sentences later, he says,
22 "The directive is from Tim Sweeney, and we are due for an
23 update next week. A separate thread with legal has already
24 kicked off with Canon." Do you see that?

25 **A.** Yes.

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1 Q. And you recognize the reference to Canon to be Canon
2 Pence, the general counsel of Epic?

3 A. Yes.

4 Q. And the last line is, "He says we will kick off a weekly
5 synch on this to get the right people in the room"; correct?

6 A. Yes. He writes that.

7 Q. Again, that is getting the right people in the room to
8 create a build of *Fortnite* that would work around the 30
9 percent revshare cut that Google would otherwise take;
10 correct?

11 A. That's pretty specific. I don't -- he just said a weekly
12 synch on this to get the right people in the room.

13 Q. I'm sorry, sir. I can't hear you, but we'll move on.

14 At the top of the first page, Mr. Malik writes another
15 email; correct?

16 A. Yes.

17 Q. And at the bottom of that email, he says, "Now we are
18 going another route, and the goal is draw Google into a legal
19 battle over antitrust. Once we are ready to submit, Epic will
20 announce publicly that we are going to Google Play. If we are
21 rejected for only offering Epic's payment solution, the battle
22 begins. It's going to be fun."

23 Did I read that correctly?

24 A. Yes.

25 Q. "Thanks for helping," Mr. Malik wrote. "If you could help

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1 me with a ballpark on time to submit/launch, I'd like to start
2 setting some expectations with Teams"; correct?

3 **A.** Yes.

4 **Q.** That's September 2019; right?

5 **A.** Correct.

6 **Q.** And, sir, your role in Project Liberty was to handle the
7 communications strategy; correct?

8 **A.** In general, yes.

9 **Q.** And you hired a PR consultant to help; correct?

10 **A.** That is correct.

11 **Q.** And that's a gentleman by the name of Lane Kasselmann?

12 **A.** That is correct.

13 **Q.** Could you please take a look at Exhibit DX3933.

14 Do you recognize this document, sir?

15 **A.** It looks like a subsection of some sort of strategy
16 document.

17 **Q.** And this is a document that you and Mr. Kasselmann
18 collaborated on; correct?

19 **A.** I believe Lane created this and I had some edits to it.

20 **Q.** All right, sir.

21 And if you would look, please, at page .002. And do you
22 see under "Apple and Google are the entrenched incumbents" --
23 do you see that?

24 **A.** Yes.

25 **Q.** And this is under "Communications Challenges"; right?

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1 **A.** Correct.

2 **Q.** And it states that, "Epic is not a sympathetic figure.

3 Epic is seen as a successful major company earning billions of
4 dollars a year and is not seen by press and players as an
5 immediate sympathetic figure in a royalty share battle."

6 Did I read that correctly?

7 **A.** Yes, you read that correctly.

8 **Q.** And was that, in fact, one of the communications
9 challenges that you understood you faced?

10 **A.** It was one of the scenarios that we discussed. It was the
11 idea -- from what I remember, it was based around the concept
12 of a billion-dollar company up against a trillion-dollar
13 company and people not really understanding the context
14 between those two, but there's a big difference between the
15 two.

16 **Q.** And so, sir, under "Communications Strategy," number two,
17 the strategy was to build a coalition of developers; correct?

18 **A.** I'm not sure. Where do you see this?

19 **Q.** Same page, .003 -- I'm sorry. Next page, my fault, sir.
20 My fault. Next page, .003, under "Communications Strategies."
21 Do you see Item 2, "build a coalition of developers"?

22 **A.** Yes.

23 **Q.** All right. And that was to be one of the strategies to
24 deal with the communications challenges; correct?

25 **A.** It was a communications strategy.

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1 **Q.** And you, in fact, sir, were offered as the corporate
2 representative related to the formation of that coalition;
3 correct?

4 **A.** You're saying in the deposition process?

5 **Q.** Yes, sir. Yes, sir.

6 **A.** Yes.

7 **Q.** And you're familiar with the Coalition for App Fairness;
8 true?

9 **A.** Yes.

10 **Q.** And that was the coalition that you and Mr. Kasselman
11 formed; correct?

12 **A.** I was involved in the early discussions for it. I did not
13 myself form it.

14 **Q.** Take a look, please, sir, at DX4177. Do you have that in
15 front of you?

16 **A.** Yes, sir.

17 **Q.** These are notes that you typed up; correct?

18 **A.** This is -- I had a habit or I still have a habit of
19 writing kind of random notes in email drafts that I use to
20 just kind of record.

21 **Q.** That's how you keep your notes sometimes?

22 **A.** Yeah.

23 **Q.** And these are notes that you kept on May 15, 2020;
24 correct?

25 **A.** It's unclear. That's probably the last edit to this

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1 document.

2 **Q.** Sir, you created these notes; correct?

3 **A.** Yes, I did.

4 **Q.** All right. And halfway down -- and you created them or
5 last edited them on May 15, 2020; correct?

6 **A.** I believe so.

7 **Q.** All right. And there are a number of entries here, but
8 let's focus on the one that starts, "Go the nuclear option."
9 Do you see that, a little over halfway down?

10 **A.** Yes.

11 **Q.** It says, "Go the nuclear option. It becomes the catalyst
12 for the coalition, which is up and running, and can
13 dimensionalize the battle for us. That being said, we
14 recommend we go the nuclear option and submit onto Google
15 Play."

16 And that was you advising that the hotfix, the nuclear
17 option, should be adopted in order to create a good PR event;
18 correct?

19 **A.** I have no idea of the context for that particular line in
20 this draft notes document.

21 **MR. DOREN:** Your Honor, I would move into evidence
22 DX4177.

23 **THE COURT:** No objection?

24 **MS. MOSKOWITZ:** No objection, Your Honor.

25 **MR. DOREN:** And DX3933 please.

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1 **THE COURT:** No objection?

2 **MS. MOSKOWITZ:** No objection.

3 (Defense Exhibits 4177 and 3933 received in evidence)

4 **BY MR. DOREN:**

5 **Q.** Sir, please take a look at DX3641. Is this exhibit also
6 notes that you created?

7 **A.** Yes. It looks like that.

8 **Q.** And either you wrote them or last edited them on May 22nd,
9 2020; correct?

10 **A.** I believe so.

11 **Q.** All right. And you have the notation there "Create
12 narrative that we are benevolent," don't you?

13 **A.** That is written there.

14 **Q.** Yes. And then the next line below "dimension" talks about
15 who can be founding members of the coalition; correct?

16 **A.** What was the question again? I'm sorry.

17 **Q.** No. We'll go on, sir.

18 **A.** Okay.

19 **Q.** Now, Epic initially -- Epic initially paid Greenbrier --
20 that's Mr. Kasselmann's firm; correct?

21 **A.** Yes.

22 **Q.** And Epic paid them \$100,000 for the PR consultation;
23 correct?

24 **A.** I believe that's correct.

25 **Q.** And it then hired an affiliated firm, a firm affiliated

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1 with Greenbrier called The Messina Group; correct?

2 **A.** Yes.

3 **Q.** That firm was hired to create the coalition; correct?

4 **A.** Yes. To help with the creation of the coalition.

5 **Q.** And at that point the spend went up to \$300,000 from Epic
6 to both Kasselmann and Messina, correct, The Messina Group?

7 **A.** Yes. I believe so.

8 **Q.** Take a look, please, at DX3297.

9 And, Your Honor, I would move to admit 3641, though I
10 thought I just did.

11 **THE COURT:** You did not.

12 No objection?

13 **MS. MOSKOWITZ:** No objection.

14 **THE COURT:** Admitted.

15 (Defense Exhibit 3641 received in evidence)

16 **MR. DOREN:** Thank you, Your Honor, very much.

17 **Q.** Mr. Weissinger, do you have Exhibit 3297 in front of you?

18 **A.** Yes, I do.

19 **Q.** And do you recognize this as a statement of work proposed
20 by The Messina Group to Epic?

21 **A.** Yes, I do.

22 **Q.** And do you recognize under the project scope, "The
23 consultant will work as directed by Matthew Weissenberg [sic]
24 or other Epic personnel so designated"?

25 **A.** "Weissinger." Yes.

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1 Q. I'm sorry, sir.

2 A. No worries.

3 Q. If you would look, please, at Exhibit .002 or page .002,
4 and you see the heading "Coalition Launch"?

5 A. Yes.

6 Q. And underneath that, it is stated, "The proven and tested
7 coalition formula is as follows: Established to correct a
8 wrong plus media interest plus sustained public attacks equals
9 success."

10 Did I read that correctly?

11 A. Yes.

12 Q. It then goes on to say, "Thus, for the coalition to be
13 effective, consultant will help to establish a reason for it
14 to exist (either organic or manufactured)"; correct, sir?

15 A. That's what it says.

16 Q. And here the reason for the existence of the coalition was
17 wholly manufactured, wasn't it?

18 A. No. The principles have always existed.

19 Q. Always existed; is that right, sir?

20 A. Well, the principles as established exist. There's no
21 manufacturing in that.

22 Q. All right, sir.

23 The coalition was incorporated in August 2020; correct?

24 A. I believe so.

25 Q. And, again, it was named the Coalition for App Fairness;

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1 true?

2 **A.** Yes.

3 **Q.** And at the time it was incorporated, Epic was the only
4 member; correct?

5 **A.** I'm not positive, but I believe so.

6 **Q.** Okay. And its existence was not publicly announced until
7 after the hotfix had been triggered; correct?

8 **A.** Correct.

9 **Q.** And it was kept under wraps until then because if Apple
10 gave in to the demands of Epic, the coalition would have
11 disappeared altogether; correct?

12 **A.** Not necessarily.

13 **Q.** But it could -- it was likely that it would have, correct,
14 sir?

15 **A.** I mean, Google's still around, too. There is other stores
16 that have the same, you know, issues with principles.

17 **Q.** Well, sir, let's take a look at Exhibit 4167.

18 And, Your Honor, the version in the binders here is
19 actually a corrected version of this exhibit. The one in the
20 main binder here did not print properly so we will hand one up
21 for the record as well.

22 **THE COURT:** Okay. And you've got two minutes before
23 our break.

24 **MR. DOREN:** Thank you, Your Honor.

25 First of all, I would move to admit DX3297.

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1 **THE COURT:** Objection?

2 **MS. MOSKOWITZ:** No objection.

3 **THE COURT:** Admitted.

4 (Defense Exhibit 3297 received in evidence)

5 **MR. DOREN:** I would also move to admit --

6 **Q.** Actually, Mr. Weissinger, do you recognize DX4167?

7 **A.** It looks like the website for the coalition.

8 **Q.** And you recognize, sir, that nowhere in this document is
9 any company other than Apple referenced; correct?

10 **THE COURT:** Apple?

11 **MR. DOREN:** Apple.

12 **THE WITNESS:** I'm not sure, but looking at it right
13 now, that looks to be the case.

14 **MR. DOREN:** Your Honor, I have about five more
15 minutes. We can stop here or I can finish up.

16 **THE COURT:** Why don't we go ahead and stop. The
17 court reporter needs a break. So we will stand in recess for
18 20 minutes.

19 Ms. Forrest, could I by the end of the day receive a hard
20 copy color printout of your latest findings of fact?

21 **MS. FORREST:** Yes.

22 **THE COURT:** The redacted version.

23 **MS. FORREST:** Yes.

24 **THE COURT:** I would appreciate it. Thank you so
25 much.

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1 All right. We will stand in recess for 20 minutes. Thank
2 you.

3 (Recess taken at 10:14 a.m.)

4 (Proceedings resumed at .m.)

5 *****

6 **THE COURT:**

7
8
9 *****DIANE*****

10 (Recess taken at .m.; resumed at 10:35 a.m.)

11 **THE COURT:** Okay. We are back on the record. The
12 record will reflect the parties are present. Witness is still
13 on the stand. And, Ms. Forrest, I'm sure I misspoke. I meant
14 redline, not redacted.

15 **MS. FORREST:** Okay. Thank you, Your Honor. Thank
16 you.

17 **THE COURT:** Thank you. You may proceed.

18 **MR. DOREN:** Thank you, Your Honor. First I would
19 like to move to admit Exhibit DX4167.

20 **THE COURT:** Any objection?

21 **MS. MOSKOWITZ:** Sorry. I'm just flipping back. I
22 don't think so. No objection.

23 **THE COURT:** Admitted.

24 (Defendant's Exhibit 4167 received in evidence)
25

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1 **BY MR. DOREN:**

2 **Q.** Just a few more questions, Mr. Weissinger. First of all,
3 could you please take a look at DX4138? Do you have that
4 document in front of you?

5 **A.** Yes, I do.

6 **Q.** And you see that the top note is from you to Mr. Zobrist
7 and others, correct?

8 **A.** Yes. Yes, it is.

9 **Q.** This is an email that you wrote on August 4th, 2020,
10 correct?

11 **A.** Yes, it is.

12 **Q.** And if you would look, please, at the second page, you see
13 that there is a Google Calendar invite, correct?

14 **A.** Yes.

15 **Q.** Also dated August -- this one is dated August 3rd, 2020,
16 correct?

17 **A.** Yes.

18 **Q.** And you see down after the statement "The next steps
19 arising from today's meeting are"?

20 Do you see that?

21 Let me walk you down --

22 **A.** Yes, I see.

23 **Q.** Let's start with the date of 8/3/2020. You see that on
24 page .002, correct?

25 **A.** Yes.

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1 Q. And the subject is: Project Liberty meeting next steps,
2 correct?

3 A. Yes.

4 Q. And then it says: Sent by Google Calendar, correct?

5 A. Yes.

6 Q. And then below that, there's a dotted line. And then
7 below that, there is more text, correct?

8 A. Yes.

9 Q. And on the third line of that text below the line, there
10 is the statement: The 13.40 build has been approved by Apple
11 and will likely hear back from Google on Tuesday afternoon.

12 Did I read that correctly?

13 A. Yes.

14 Q. Then below that is the invite for a Project Liberty update
15 on August 3rd, 2020 from 3:00 p.m. to 4: p.m. Eastern,
16 correct?

17 A. Correct.

18 Q. You see you were an invitee at the bottom of the list of
19 addressees, correct?

20 A. Yes, I'm listed as optional.

21 Q. Do you remember that meeting, sir?

22 A. It's hard to tell.

23 Q. You attended a lot of Project Liberty meetings?

24 A. Yes.

25 Q. Let's go back to the first page, please, of 4138. And do

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1 you see the email from Maureen Maloney at Cravath on August 4,
2 2020 at 9:29 a.m.?

3 **A.** Yes.

4 **Q.** And it states that: Gary asked if he could be added to
5 these emails (meeting updates, decks, next steps, et cetera).
6 Correct?

7 **A.** Yes.

8 **Q.** And then above that, Mr. Zobrist from Epic writes: Yes.
9 For clarity, I go to the Project Liberty meeting invite and
10 hit send all with my note. If Gary didn't get the note, does
11 that mean he wasn't on the meeting invitation list? I could
12 swear he attended.

13 That is from Mr. Zobrist, correct?

14 **A.** Yes.

15 **Q.** And then Mr. Edrington at Epic Games said: Oh, I see what
16 happened. I sent all the invites to Maureen, who then
17 forwards to Gary or whoever can make it from Cravath, so the
18 email went to her and not to him, if that makes sense.

19 Do you understand that to be a reference to Maureen
20 Maloney, assistant to Gary A. Bornstein?

21 **A.** I don't know if I know Maureen, but I see it in her email
22 signature.

23 **Q.** Thank you. Above that, you write: Gary has this account
24 as well, which could be added to the invite, I think.

25 Gary.Bornstein@XAEpicGames.com.

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1 Correct?

2 **A.** Yes.

3 **Q.** Mr. Bornstein had been given an Epic Games email account
4 during the course of Project Liberty.

5 **A.** An external account within Epic Games internal. That's
6 what XA, I think, stands for.

7 **Q.** Thank you. Thank you. Sir, if you could look, please, at
8 DX4072.

9 **MR. DOREN:** Your Honor, I would move DX4138 into
10 evidence, please.

11 **THE COURT:** No objection?

12 **MS. MOSKOWITZ:** No objection.

13 **THE COURT:** Admitted.

14 (Defendant's Exhibit 4138 received in evidence)

15 **MR. DOREN:** I believe it is already admitted into
16 evidence.

17 **THE COURT:** Yes, it is.

18 **MR. DOREN:** Thank you, Your Honor.

19 **BY MR. DOREN:**

20 **Q.** Mr. Weissinger, do you have Exhibit 4072 in front of you?

21 **A.** I do.

22 **Q.** This is another Google Calendar invite, correct?

23 **A.** Yes.

24 **Q.** And rather than have you read through the addressee block,
25 I will assure you that you are there, as is Mr. Bornstein.

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1 But I will ask you to turn to page 2 of the document.

2 **A.** Okay.

3 **Q.** And there is a list of invitees there, correct?

4 **A.** Yes.

5 **Q.** And do you see a little over halfway down, Matt
6 Weissinger?

7 **A.** That's me.

8 **Q.** Yes, sir. At the very end of the list on page .003, the
9 last three names on the list are Tim Sweeney, correct?

10 **A.** Yes.

11 **Q.** Gary Bornstein, correct?

12 **A.** Yes.

13 **Q.** And Maureen Maloney, correct?

14 **A.** Yes.

15 **Q.** Let's go back, please, to page 1. The subject of this is:
16 Liberty Block. Do you see that?

17 **A.** Yes.

18 **Q.** And the third paragraph says, we've added you -- well,
19 first of all, the first sentence says: Thanks for joining our
20 run of show review earlier. True?

21 **A.** Yes.

22 **Q.** And the run of show is basically a review of each step
23 along the way in the launching of Project Liberty and the
24 firing off of the hot fix on August 13, 2020, correct?

25 **A.** Yes.

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1 Q. And the third paragraph says: We've added you all to this
2 meeting block tomorrow that includes the Zoom dial-in for our
3 war room.

4 So there was a virtual war room for purposes of the hours
5 around the hot fix implementation?

6 A. Yes.

7 Q. Additionally, we've added you all to our new private
8 hashtag Project Liberty war room Slack channel. Correct?

9 A. Yes.

10 Q. The next paragraph says: We have modified the run of show
11 reviewed earlier to have individual sheets for each phase and
12 scenario. Correct?

13 A. Yes.

14 Q. This was a carefully planned, carefully orchestrated, and
15 carefully supervised undertaking, correct?

16 A. Yes.

17 Q. Mr. Weissinger, along with the coalition, you were also
18 responsible for console partner communications related to
19 Project Liberty, correct?

20 A. Yes.

21 Q. And if you could please look at Exhibit DX4652.

22 A. Okay.

23 Q. Do you have that in front of you, sir?

24 A. Yes, sir.

25 Q. And this is a document that you were using in 2020 to pull

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1 together a communications strategy around informing partners
2 of the upcoming price changes, correct?

3 **A.** I'm not sure. There's not a lot of the context for the
4 document. Were you asking if I created this or the substance
5 of it?

6 **Q.** I'm asking if this is a document that you used to pull
7 together a communications strategy around informing partners
8 of the upcoming price changes.

9 **A.** It looks like a version of a communication plan. I'm not
10 sure if that is how it actually went down though.

11 **Q.** Okay. But this is a working document that you were using
12 at the time, correct?

13 **A.** It looks like a planning document, but looking at it, I'm
14 not sure this is how it actually was communicated.

15 **Q.** But this is a document that you were using to pull
16 together your communication strategy, correct?

17 **A.** This was one of them.

18 **Q.** Okay. Thank you, sir.

19 And you see the reference to Liberty console partner
20 communications, correct? At the top of the page, sir.

21 **A.** Yes.

22 **Q.** And you recognize that to be a reference to Project
23 Liberty, correct?

24 **A.** Correct.

25 **Q.** And you say: Phase I, inform 1P console partners, Sony,

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1 Microsoft and Nintendo, about 20 percent pricing change and
2 have that communication July 30 or later.

3 That's what you wrote in this document, correct?

4 **MS. MOSKOWITZ:** Objection, foundation.

5 **THE WITNESS:** I don't know if I wrote it.

6 **THE COURT:** Hold on. Your attorney made an
7 objection.

8 Lay some foundation. Sustained.

9 **BY MR. DOREN:**

10 **Q.** Now, sir, this is a document that you used in pulling
11 together your communication strategy, correct?

12 **A.** It is one document.

13 **Q.** One of many, many documents, correct?

14 **A.** Yes.

15 **Q.** All right. But this is one of the documents that you used
16 in pulling together your Project Liberty communication
17 strategy, correct? One of the many.

18 **A.** Yes, but I'm not sure this is how the communication
19 strategy actually went out.

20 **Q.** You made that clear. You've made that clear, sir.

21 **A.** Okay.

22 **Q.** And at this point in this document, the statement is:
23 Inform console partners about 20 percent pricing change
24 (July 30 or later). Correct, that's what this says?

25 **A.** That is what this says.

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1 Q. In fact, there was going to be an -- Epic had decided that
2 it would drop prices on V-Bucks by 20 percent on consoles even
3 though there would be no decrease in the 30 percent commission
4 on consoles, correct?

5 A. Correct.

6 Q. And then below that, Phase II was, inform all partners
7 about overall pricing efforts on August 13, correct?

8 A. Correct.

9 Q. And the pricing efforts included triggering the hotfix
10 within the App Store, correct?

11 A. Correct.

12 Q. And that -- on August 13th was when there was going to be
13 a communication with Apple, and not before, correct?

14 A. There was going to be no communication prior to
15 August 13th.

16 Q. Turn to page 3, please. The third page of this exhibit, I
17 should say.

18 A. Yes.

19 Q. You see the Key Points colon?

20 A. Yes.

21 Q. And about -- the fourth bullet point is in a different
22 colored ink, correct?

23 A. Yes, it is.

24 Q. And it says: Sony only, let's connect. I'd love to
25 connect with you after the price drop. Let's set some time on

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1 the calendar for August 13th.

2 So Sony was going to have a special one-on-one
3 communication with Epic, correct?

4 **A.** There was a communication with first party, but this is
5 Phase I exact's response, Phase I with Phil Spencer, Phil
6 Rosenberg, Steve Singer. I'm not aware of that communication
7 taking place in advance, which is why this Phase I, I don't
8 think that is how the communication worked out.

9 **Q.** Sir, the document says: Sony only, let's connect. Let's
10 set some time on the calendar for August 13th. Correct?

11 That is what the document says?

12 **A.** That is what this document says.

13 **Q.** And this document was created after Sony invested its
14 first \$250 million in Epic, correct?

15 **A.** I'm not sure of the timing, but I believe it's public,
16 so --

17 **Q.** And the next bullet point says: The price cut is
18 beneficial because. Do you see that? The very next bullet
19 point under Key Points.

20 **A.** Okay. Yes.

21 **Q.** That was intended to be a communication to all of your
22 partners, right?

23 Sir?

24 **A.** These were some of the ideas that were discussed to be
25 communicated. Whether or not they were communicated --

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1 Q. Thank you. And by the way, as of the time this document
2 was created, you are still referring to Apple as a partner of
3 Epic's, aren't you?

4 A. Yes.

5 Q. And the first reason that the price cut is beneficial in
6 this document is an accelerator for purchase
7 velocity/frequency. And, sir, does that mean that if the
8 prices are lower, people may buy more V-Bucks?

9 A. Yes.

10 Q. And they may make more purchases, more frequently?

11 A. Yes.

12 Q. And the next bullet point is: An important -- do you
13 think that means "important," "an import"?

14 A. I think it would be "an important."

15 Q. An important lock-in tactic for Season 14 Battle Pass
16 conversion.

17 Do you see that?

18 A. Uh-huh.

19 Q. Sir, by using the term "lock-in tactic," did you mean that
20 people would not be able to leave *Fortnite* if they didn't like
21 the experience there?

22 A. I believe that point was based around the economy being a
23 tough time for a lot of people, and that a price cut would be
24 beneficial for people to ensure that they continued to play
25 *Fortnite* when they're making limited purchase decisions.

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1 Q. You were looking to do things that would make people want
2 to stay in the *Fortnite* environment, correct?

3 A. Yes.

4 Q. So by "lock in," you simply meant you wanted to make the
5 game even more attractive to people, correct?

6 A. Yes.

7 Q. And you wanted to help promote their desire to be there
8 and to play the game and to make purchases within the game,
9 correct?

10 A. Yes.

11 Q. And, sir, you have an MBA from Harvard, don't you?

12 A. MIT.

13 Q. MIT. My apologies.

14 Sir, you would not use the term "lock in" if you thought
15 there was anything wrong with it, would you?

16 A. No.

17 Q. And, sir, the third bullet point is: Beneficial to the
18 long-term health of the *Fortnite* economy.

19 Did I read that correctly?

20 A. Yes.

21 Q. You believed it was beneficial to the long-term health of
22 the *Fortnite* economy because in 2019, revenues in *Fortnite* had
23 begun to lag, and you thought that this would perhaps increase
24 interest in purchases, true?

25 A. Incorrect.

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1 Q. And then the fourth -- or the last solid bullet point
2 says: The price cut should not impact forecast for 2020
3 because. Do you see that?

4 A. Yes.

5 Q. It is stated here: We have a huge IP pipeline for
6 Season 4 and 5. Correct?

7 A. Yes.

8 Q. And what you mean there was that you would have a lot of
9 things to sell people in *Fortnite*, right?

10 A. Yes.

11 Q. And the second bullet point says: The subscription is
12 still 11.99 and arrives in Season 5. Did I read that
13 correctly?

14 A. Yes.

15 Q. And what you mean there is that subscriptions will provide
16 a baseline flow of revenue, and that won't change because of
17 this 20 percent decrease, correct?

18 A. I don't know if that is exactly what I mean. I think it
19 was just that subscription is -- the price is going to stay
20 the same and that it will arrive with Season 5 still, despite
21 these -- the price drop elsewhere.

22 Q. Sir, in the last bullet point here, you say: We have the
23 flexibility to create higher-priced bundles and new mythic
24 rarities, if needed. Did I read that correctly?

25 MS. MOSKOWITZ: Objection. Continues to

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1 misrepresent.

2 **THE COURT:** Overruled. He just read it. He didn't
3 characterize it.

4 **MS. MOSKOWITZ:** The "you say" part, Your Honor.

5 **THE COURT:** Overruled.

6 **BY MR. DOREN:**

7 **Q.** Mr. Weissinger, do you see that entry?

8 **A.** Yes.

9 **Q.** And we have the flexibility to create higher-priced
10 bundles. In other words, while the price of V-Bucks may have
11 gone down, you could account for that by increasing the price
12 of skins and cosmetics to recapture that revenue, correct?

13 **A.** I think it's just saying we have the ability to create
14 higher-priced bundles, if needed.

15 **Q.** Right. Because you can -- you have got a lot of IP in the
16 pipeline, and if revenue drags, you can put together some
17 bundles that you charge a higher price for to generate more
18 revenue through lower-priced V-Bucks, correct?

19 **A.** Yes, in general.

20 **Q.** Thank you, sir.

21 **MR. DOREN:** I pass the witness, Your Honor.

22 **THE COURT:** Limited to the scope of Cross.

23 **MR. DOREN:** Your Honor, could I please move to admit
24 DX4652.

25 **THE COURT:** No objection?

1 **MS. MOSKOWITZ:** No objection, Your Honor.

2 **THE COURT:** Admitted.

3 (Defendant's Exhibit 4652 received in evidence)

4 **REDIRECT EXAMINATION**

5 **BY MS. MOSKOWITZ**

6 **Q.** Hello again. Mr. Weissinger, you were shown *Battle Royale*
7 mode on the screen in your cross-examination. Do you recall
8 that?

9 **A.** Yes.

10 **Q.** Do *Fortnite* players have to play *Battle Royale* mode?

11 **A.** No.

12 **Q.** Even within *Battle Royale* mode, do the users within that
13 mode have to compete?

14 **A.** No, they do not.

15 **Q.** You were also shown some *Party Royale* mode. I think that
16 was the skydiving practice clip.

17 Do you recall that?

18 **A.** Yes.

19 **Q.** Are there guns in *Party Royale*?

20 **A.** No.

21 **Q.** And are there social experiences in *Party Royale* that you
22 were not shown?

23 **A.** Yes.

24 **Q.** Are there entertainment aspects and elements of *Party*
25 *Royale* that you were not shown?

1 **A.** Yes.

2 **Q.** Did we see some of those on Friday?

3 **A.** Yes.

4 **Q.** You were asked some questions about game mechanic tools.
5 Do you remember that?

6 **A.** Yes.

7 **Q.** When a user is using those tools to create in *Creative*
8 *Mode*, is there any game play happening?

9 **A.** No.

10 **Q.** Do users use *Creative Mode* -- other *Creative Mode* tools
11 for nongame creation uses?

12 **A.** Yes.

13 **Q.** Can you give us some examples again?

14 **A.** I think I mentioned the fashion show, we mentioned some of
15 the virtual tourism. Music composition was another one that
16 we mentioned.

17 **Q.** Did we see some examples of that on Friday as well?

18 **A.** Yes.

19 **Q.** Is the game play that is happening in *Creative Mode* Epic
20 Games or user-created games?

21 **A.** It is over one of 800,000 user-created island experiences.

22 **Q.** Overall, do you view *Party Royale* and *Creative Modes* as
23 games?

24 **A.** Repeat that again.

25 **Q.** Overall, looking at *Party Royale* mode and *Creative Mode*,

1 do you view those as games?

2 **A.** No. It is more than that.

3 **Q.** Do you recall you were asked about DX3457, which if you
4 need to turn to it, it was a September 2019 email about the
5 Chapter 2 potential promotion?

6 **THE COURT:** When you say, no, it is more than that,
7 do you mean that it is, but it's more?

8 **THE WITNESS:** There are experiences beyond that, and
9 there are some experiences that are separate and excluded from
10 that as well. So there are some that I don't think I would
11 qualify it as a game.

12 **THE COURT:** But there are some that you do?

13 **THE WITNESS:** Correct.

14 **THE COURT:** Go ahead.

15 **BY MS. MOSKOWITZ:**

16 **Q.** So, in other words, within *Party Royale* and *Creative Mode*,
17 there might be some components here and there that may qualify
18 as games, but overall, do you view them as games?

19 **THE COURT:** Is there a percentage?

20 **THE WITNESS:** I don't know if I have a definite
21 breakdown off the top of my head.

22 **THE COURT:** Any sense? 50/50? 60/40?

23 **THE WITNESS:** I am not sure. The problem is it also
24 really depends on if there is like a *Party Royale* event
25 happening that day, you are going to see some oversized effect

1 of everybody watching the concert during the movie. So it
2 might be --

3 **THE COURT:** But, what, 15 minutes, you said, are the
4 concerts?

5 **THE WITNESS:** Some of them are in content all
6 weekend.

7 **THE COURT:** Excuse me?

8 **THE WITNESS:** Some of them might be airing and
9 replaying content all weekend.

10 **THE COURT:** So you don't have any way to quantify
11 game versus experience?

12 **THE WITNESS:** Not off the top of my head.

13 **THE COURT:** Well, do you have any documents anywhere
14 that quantify it?

15 **THE WITNESS:** I believe we do.

16 **THE COURT:** Okay. Go ahead.

17 **BY MS. MOSKOWITZ:**

18 **Q.** Let's come back to where I was just going. You also were
19 asked about concerts, do you recall that? Not about this
20 document, just generally.

21 **A.** Yes.

22 **Q.** And I think you were asked if all of the musicians or
23 performers in those concerts are appearing in their digital
24 representation of themselves, do you recall that?

25 **A.** Yes.

1 Q. Do all of the performers appear as a digital
2 representation of themselves?

3 A. Sorry. You're correct. Some of them will actually appear
4 through streaming video that comes into *Party Royale*, in which
5 case, some of those other actual likeness appearing digitally.

6 Q. And while a *Fortnite* concert is going on, what are the
7 users doing? What is happening in there?

8 A. In general, people are dancing and emoting. Sometimes we
9 have, like, some choreographed emotes that will occur in
10 sequence with some of the beats. There is also kind of like
11 light shows and environmental effects that are going on in
12 there. It is kind of like its own stadium experience.

13 Q. Just going back to the document I was just asking you
14 about, if we can put that back up on the screen. That is
15 DX3457. That was September 27, 2019; is that right?

16 A. Yes.

17 Q. And if you could turn to PX2435, which is in your other
18 binder that we looked at in the direct testimony. It is also
19 on the screen. What is the date of that document, sir?

20 A. October 2nd.

21 Q. In the email from Mr. Malik to you and others, there is
22 some discussion about the Chapter 2 -- potential Chapter 2
23 promotion from Apple; is that right?

24 A. Yes.

25 Q. And what does it say here that Epic decided in the second

1 paragraph?

2 **A.** The group on this thread has met a few times and have
3 elected to turn down this placement opportunity because of the
4 risk of leaking an asset is high and would negatively impact
5 the Chapter 2 release.

6 **Q.** And what, in fact, ended up happening with the assets for
7 Chapter 2, again?

8 **A.** Apple leaked them.

9 **Q.** You were asked about a number of other leaks. Do you have
10 a sense of what the worst leak was that *Fortnite* experienced?

11 **A.** That Chapter 2 leak.

12 **Q.** You were also asked on Cross about, I think it was DX3069.
13 If you could turn to that in your white binder.

14 **A.** Yes.

15 **Q.** Now I just need to get there. Sorry.

16 This is an email chain from September 27, 2019; is that
17 right?

18 **A.** Yes.

19 **Q.** Were you involved in this email chain?

20 **A.** I do not see myself in this chain.

21 **Q.** And do you recall being involved in the discussion that is
22 taking place within this email chain?

23 **A.** I do not.

24 **Q.** Do you have any understanding as to whether this was or
25 was not part of Project Liberty?

1 **A.** I do not.

2 **Q.** Do you have any understanding whatsoever about the
3 discussion in this document?

4 **A.** No, other than what is written there.

5 **Q.** A little bit of a digression. We talked about Peely, our
6 banana. Do you remember that?

7 **A.** I do.

8 **Q.** And I think there might have been an implication that to
9 show Peely without a suit would have been inappropriate. Do
10 you recall that?

11 **A.** Yes.

12 **Q.** Is there anything inappropriate about Peely without a
13 suit?

14 **A.** No, there is not.

15 **Q.** If we could just put on the screen a picture of Peely. Is
16 there anything inappropriate of Peely without clothes?

17 **A.** It's just a banana man.

18 **Q.** Did you tell your other partners about the implementation
19 or the plan to implement Epic Direct Pay either in the iOS
20 app or the Android app before it happened?

21 **A.** Not that I am aware of.

22 **Q.** So what were the discussions that were being contemplated
23 with partners about before that happened?

24 **A.** We were telling them in advance that prices were going to
25 be reduced by 20 percent.

1 Q. If you could turn to DX4652 that you were asked about.
2 Again, in your white binder.

3 A. Yes.

4 Q. On page 4652.001, you were asked about the title of that
5 document. Do you recall that?

6 A. Yes.

7 Q. I think the only part that was read was "Liberty console
8 partner communications," do you see that? On the top.

9 A. Oh, the only -- that was read. R-E-A-D. Yes.

10 Q. Are there other words that appear next to that title?

11 A. "Speculative," "hypothetical."

12 Q. Did you write this document?

13 A. I don't remember.

14 Q. You can't say one way or the other?

15 A. No.

16 MS. MOSKOWITZ: No further questions, Your Honor.

17 THE COURT: Recross limited to the scope of redirect.

18 MR. DOREN: Thank you, Your Honor.

19 **RECROSS-EXAMINATION**

20 **BY MR. DOREN:**

21 Q. Just a couple of questions, sir. The dancing and emoting
22 at the concerts, are those abilities purchased in the item
23 store?

24 A. Yes.

25 Q. So those are paid for with V-Bucks?

1 **A.** Some of them you can earn for free.

2 **Q.** And, for example, with the Travis Scott concert, there was
3 also a Travis Scott skin that people could purchase in the
4 item store?

5 **A.** Yes.

6 **Q.** And we talked about creating islands. Is that fun
7 creating an island?

8 **A.** Yeah, it's awesome.

9 **Q.** And so some people do it for fun, correct? And some
10 people do it to create games for others to come play, true?

11 **A.** I would say the large majority do it for fun.

12 **Q.** Great. For those who do it to create games, Epic pays
13 them 5 percent on any in-app purchases made within their game,
14 correct?

15 **A.** I don't think it works like that.

16 **Q.** You don't. Okay, sir.

17 In terms of this Chapter 2 leak, again, we always have a
18 tendency to be speaking in generalities here, so let's be
19 specific.

20 What the Chapter 2 leak by Apple was, was that some art
21 appeared on the Italian storefront for a few minutes and
22 screenshots were captured of it by people there, correct?

23 **A.** That's correct.

24 **Q.** That is all it was, correct?

25 **A.** That was a huge leak.

1 Q. Nothing more than that, though, correct?

2 A. It was the key art image of the Chapter 2 season.

3 Q. Sir, my question is, is that all that happened?

4 A. Yes.

5 MR. DOREN: Thank you.

6 THE COURT: Anything on those questions?

7 MS. MOSKOWITZ: Nothing further, Your Honor. Thank
8 you.

9 THE COURT: All right, sir, you may step down. You
10 are excused.

11 THE WITNESS: Thank you, Your Honor.

12 THE COURT: Next witness.

13 MS. FORREST: Your Honor, Mr. Bornstein will be here
14 in just a moment. We will be calling Dr. Evans.

15 THE COURT: Stand, please, sir.

16 (DAVID EVANS, called as a witness for the Plaintiff,
17 having been duly sworn, testified as follows:)

18 THE WITNESS: I do.

19 THE CLERK: Please be seated. And then would you
20 please state your full name and spell your last name.

21 THE WITNESS: My name is David S. Evans. E-V-A-N-S.

22 THE COURT: Good morning, sir.

23 THE WITNESS: Good morning, Your Honor.

24 THE COURT: You may proceed, Mr. Bornstein.

25 MR. BORNSTEIN: Thank you, Your Honor.

1 Ms. Greenfield is going to hand up a binder, if she may.

2 **THE COURT:** She may.

3 **MR. BORNSTEIN:** I have two brief housekeeping items
4 for the Court, if that is acceptable. The first is just
5 relating to confidentiality. We have some slides that are in
6 Dr. Evans' presentation which are the subject of the sealing
7 order. How we propose to handle that is not to publish them
8 to the room but to have Dr. Evans speak to them without
9 revealing the specific numbers that are the subject of Your
10 Honor's order. And, Your Honor, Dr. Evans and counsel for
11 Apple all have full, unredacted copies of the materials.

12 **THE COURT:** Sounds fine, Mr. Bornstein.

13 **MR. BORNSTEIN:** Thank you. And then the other issue
14 is consistent with Your Honor's email over the weekend, we
15 prepared and have in the binder a version of the written
16 testimony that redacts out, or at least for Your Honor
17 highlights the materials for which there is not currently
18 admitted evidence in the record or 703 materials.

19 We have been working with Apple's counsel while
20 Mr. Weissinger was on the stand and we've, I believe,
21 succeeded in reaching an agreement in principle which we are
22 documenting that would allow us to unredact more of the
23 material.

24 And so consistent with Your Honor's email, we would intend
25 subsequently to submit an amended version that reflects the

1 additional material that the parties will present by
2 stipulation.

3 **THE COURT:** Okay. Well, until I see it, I'm not sure
4 what my opinion is going to be on it, but let's proceed.

5 **MR. BORNSTEIN:** I understand, Your Honor. Thank you.

6 **DIRECT EXAMINATION**

7 **BY MR. BORNSTEIN:**

8 **Q.** Would you please introduce yourself one more time for the
9 Court, please?

10 **A.** Yes. My name is David Evans.

11 **Q.** And what is your area of expertise?

12 **A.** I am an economist. I specialize in an area called
13 industrial organization.

14 **Q.** Do you have a particular area of focus within industrial
15 organization?

16 **A.** Yes. For about the last 20 years, I have been heavily
17 focused on platform economics, also antitrust economics. And
18 then I've done a lot of work on two broad industries: The
19 digital economy, which obviously covers a lot, and then the
20 entertainment industry.

21 **Q.** Can I suggest that you bring the microphone a little
22 closer.

23 **A.** Is this better?

24 **Q.** That is better. Thank you.

25 What is your educational background?

1 **A.** I have a Ph.D. in economics from the University of
2 Chicago. I also received my BA and MA degrees, also in
3 economics from there.

4 **Q.** Have you published any books or articles or other writings
5 in the field of industrial organization?

6 **A.** I have.

7 **Q.** What have you published?

8 **A.** I've published six major books and over a hundred
9 articles. They don't necessarily all cover industrial
10 organization. That is the scope of my writings. Most of them
11 are industrial organization.

12 **MR. BORNSTEIN:** Your Honor, we would offer Dr. Evans
13 as an expert witness in industrial organization and platform
14 economics.

15 **THE COURT:** No objection?

16 **MR. SWANSON:** No objection, Your Honor.

17 And Dan Swanson, to introduce myself, for Apple.

18 **THE COURT:** Welcome to the courtroom. He's admitted.

19 **THE CLERK:** Counsel, the mic on the table is on,
20 okay, for you?

21 **THE COURT:** I appreciate you standing, but we need to
22 have you at the mic. Go ahead.

23 **MR. BORNSTEIN:** Thank you, Your Honor.

24 **BY MR. BORNSTEIN:**

25 **Q.** Dr. Evans, did you prepare any written testimony for this

1 matter?

2 **A.** I have.

3 **Q.** Who wrote that testimony?

4 **A.** I did.

5 **Q.** Does the written testimony accurately reflect the opinions
6 that you have formed about this case?

7 **A.** Yes, it does.

8 **Q.** Is there anything in your written testimony that you would
9 like to change?

10 **A.** No.

11 **Q.** Have you reviewed the written testimony submitted by the
12 experts retained by Apple?

13 **A.** I've reviewed the written testimony by the economist
14 retained by Apple.

15 **Q.** Thank you.

16 And is there anything in the economist's report submitted
17 by Apple that causes you to want to change anything in your
18 testimony?

19 **A.** No, it does not.

20 **Q.** Please take a look at the tab labeled Expert 1 in your
21 binder.

22 Please tell me what this is, sir.

23 **A.** This is my -- this is my written direct testimony that I
24 prepared.

25 **MR. BORNSTEIN:** Your Honor, we would offer Dr. Evans'

1 testimony into evidence at this point.

2 **THE COURT:** Any objection?

3 **MR. SWANSON:** Your Honor, I think we are still
4 working out the issues, and I know Your Honor said you wanted
5 to look at it as well, as to the extent to which the written
6 testimony actually reflects evidence that is in or will be in
7 the record. So subject to the continuing negotiations, other
8 than that, we don't object.

9 **THE COURT:** Okay. So it is provisionally admitted.

10 **MR. BORNSTEIN:** Thank you.

11 **THE COURT:** I had an -- on April 28th, 2020, you
12 provided me with an unredacted version of that document. Is
13 that -- has there been any change since April 28, 2021 to what
14 you are submitting now?

15 **MR. BORNSTEIN:** There is no change whatsoever. The
16 only change in the document we provided you today was an
17 effort to comply with Your Honor's email this morning.

18 **THE COURT:** Thank you. Proceed. Proceed.

19 **BY MR. BORNSTEIN:**

20 **Q.** Dr. Evans, what was your assignment in this matter?

21 **A.** I was asked to address two issues. The first concerns the
22 relevant market -- relevant markets for analyzing the two
23 kinds of conduct that are at issue in this case. And the
24 second is, given those relevant markets, to examine the
25 competitive consequences of that conduct.

1 **THE COURT:** Mr. Bornstein, do you have a copy of this
2 deck for me?

3 **MR. BORNSTEIN:** It should be in your binder, Your
4 Honor. If it is not, we will pass one up.

5 **THE COURT:** Oh, I see.

6 **MR. BORNSTEIN:** It should be labeled PDX41 for
7 identification. We can put that on the record as well.

8 **THE COURT:** Go ahead. Thank you.

9 **MR. BORNSTEIN:** Thank you.

10 **BY MR. BORNSTEIN:**

11 **Q.** You referred just now to two sets of restrictions that you
12 were asked to look at. Can you please identify what those
13 are?

14 **A.** Yes. The first set of restrictions concerns Apple's
15 restrictions on the ability of distributors, of app developers
16 and app users to distribute apps in ways other than through
17 the App Store. The second restriction refers to the mandate
18 to use IAP and, therefore, the Apple payment solution.

19 **Q.** We will cover quite a lot of ground on that, but I want to
20 start with an issue about which there has been some discussion
21 and testimony so far in the trial.

22 Can you first tell us what your aftermarket market
23 definition is that you described in your written testimony?

24 **A.** Yes. I concluded that the relevant aftermarket was the
25 market for the distribution of iOS apps.

1 Q. And does that market definition include all iOS apps or
2 some narrower category of iOS apps?

3 A. That includes all iOS apps.

4 Q. So let's get to why that is.

5 Can you tell me where you start in the process of defining
6 a market as an economist?

7 A. Yes. As a general matter, in an antitrust case, the
8 starting point for market definition is the conduct at issue;
9 the supplier who is engaged in that conduct or the business,
10 if you will; and the product or products that are related to
11 that conduct and that supplier.

12 Q. So for this aftermarket, what conduct did you start with?

13 A. The conduct I started with were the Apple restrictions
14 that prevented other channels of distribution other than the
15 App Store.

16 Q. And does that conduct apply to all apps or some narrower
17 category of apps?

18 A. That conduct applies to all apps.

19 Q. Let me ask you to take a look at a graphic which is on
20 slide 5 which we've adapted from the opening statement given
21 by Apple's counsel.

22 Incidentally, did you have the opportunity to review that
23 opening statement?

24 A. I did.

25 Q. Did you see those slides?

1 **A.** I did.

2 **Q.** And on this slide, we have the App Store as well as three
3 apps: *Fortnite*, *Waze*, and *Starbucks*. Can you explain the
4 economic relationship between the App Store and those apps?

5 **A.** Yes. The App Store is a supplier of distribution
6 services. Those apps are customers of the App Store in the
7 sense that they are relying on the App Store for distribution
8 services.

9 **Q.** Do those apps compete with one another, in your view?

10 **A.** They do not.

11 **Q.** So how is it that you form the conclusion that there is a
12 single market for app distribution on iOS consisting of
13 these and other apps?

14 **A.** Because the App Store is providing, in effect, an input to
15 those three apps; namely, distribution services. So they are
16 all customers of the app for that purpose.

17 **Q.** Is it common or uncommon in economics for a market to
18 include customers that do not compete with one another?

19 **A.** With regard to markets, we're talking about a B to B
20 relationship, so one business providing an import or a set of
21 services to another set of businesses, it is common for the
22 businesses to not compete with each other.

23 **THE COURT:** Could you explain? Are you saying -- you
24 said apps are customers. Do you mean the developers of the
25 apps are customers?

1 **THE WITNESS:** Yes. Thank you for that clarification,
2 Your Honor. That is absolutely correct. It is the developers
3 that are the customers of the App Store, and it is the apps
4 that are the products.

5 **THE COURT:** Thank you.

6 **THE WITNESS:** That's correct.

7 **BY MR. BORNSTEIN:**

8 **Q.** When you say the apps are the products, they are the
9 product of whom?

10 **A.** The apps are the products of the developers, they're the
11 products that the developers have created.

12 **Q.** So in this circumstance, the developers purchase something
13 from who?

14 **A.** The developers obtain distribution services from the App
15 Store.

16 **Q.** And then the developers turn around and provide what to
17 their customers?

18 **A.** The developers provide apps to their customers, and those
19 apps provide services to those customers.

20 **Q.** And in your answer a minute ago, you referred to a B2B
21 situation. Can you just explain what that is and make sure
22 the court reporter got it?

23 **A.** Yes, I am sorry.

24 So there are two kinds of markets typically. There are
25 B2C markets where a business, a supplier, is selling things to

1 consumers, people. There are also markets that are B2B in the
2 sense that you have a business that is a supplier that is
3 selling an input or services to other businesses. And both
4 kinds of markets are, in fact, very important in the economy.

5 **Q.** And is this market B2B or is it B2C?

6 **THE COURT:** Which market?

7 **MR. BORNSTEIN:** I apologize, Your Honor.

8 **BY MR. BORNSTEIN:**

9 **Q.** The market in which the App Store provides services to the
10 developers these apps, is it a B2B or is it a B2C market?

11 **A.** Because it is a platform market, it is different than what
12 I just said.

13 So on one side, the customers of the App Store are the
14 developer businesses, and on the other side of the App Store,
15 the other side of the platform, are consumers that want to get
16 those apps.

17 **Q.** And let's step back from a platform situation and talk
18 about an ordinary single-sided business-to-business market.

19 Is it common in that circumstance to have a market in
20 which the customers do not compete with one another in their
21 businesses?

22 **A.** Yes.

23 **Q.** And can you give an example of such a circumstance?

24 **A.** Yes. An example is a steel manufacturer that is perhaps
25 selling steel plates or other steel supplies to a diverse

1 group of businesses that have a need for steel.

2 **Q.** And in the circumstance we have on the slide of the steel
3 manufacturer and an I-beam, presumably a building supplier, an
4 auto maker and a furniture supplier, do those three customers,
5 in your view, the customers for steel, compete with one
6 another?

7 **A.** No. They are separate -- they're industries, they're
8 separate businesses that are using that input, steel, in just
9 different ways for their particular products.

10 **Q.** And let's step back now into the world of platforms. Can
11 you give an example of a different platform other than the App
12 Store in which there are business participants, customers, who
13 do not compete with one another?

14 **A.** Yes. So let me give an example of a platform. The
15 American Express credit card network is an example of a
16 platform. And it's similar to the App Store in the sense that
17 it is providing services to both business customers,
18 merchants, and to consumers, card holders.

19 **Q.** And would you define a market in the Amex situation that
20 is segregated by different types of merchants?

21 **A.** No.

22 **Q.** What kind of market would you define instead for the
23 credit card network?

24 **A.** Well, generally the credit card network, like the steel
25 manufacturer, is selling -- is selling an input to a diverse

1 group of customers. In the case of -- in the case of Amex, on
2 the merchant side, it is selling it to restaurants, hardware
3 stores, shoe boutiques and so forth. On the consumer side, it
4 is selling it to -- payment services to a diverse group of
5 card holders who can then use their cards at that diverse
6 group of businesses.

7 **Q.** How would you compare the relationship that Amex has to
8 these various merchants on the slide to the relationship that
9 the App Store has to the various developers on the slide?

10 **A.** It's similar. In the credit card case, these are
11 merchants that are selling goods to consumers. In the case of
12 the App Store, it is developers who are producing apps that
13 are providing services to consumers.

14 **Q.** And in terms of the relationship that those merchants or
15 developers have to the platform supplier, is there any
16 difference, or are they the same?

17 **A.** If you can ask me that question one more time, please.

18 **Q.** I can ask you a better question, I hope.

19 Is the relationship that the merchants have to the credit
20 card network any different from the relationship that the
21 developers have to the App Store?

22 **A.** They are getting different services from the platform, but
23 in terms of the general economic relationship of receiving --
24 getting an input from a supplier, no, it is similar in that
25 sense.

1 Q. Let's turn to another issue upfront that has been the
2 focus of some testimony recently, which is whether or not this
3 app distribution market that you've defined includes the
4 distribution of apps on game consoles.

5 What is your opinion on whether the distribution of apps
6 on game consoles is in the same market as the distribution of
7 apps on an iOS device?

8 A. That the distribution of apps for game consoles is not in
9 the relevant market for app distribution for iOS.

10 Q. Can you tell us why, please?

11 A. Yes.

12 So, fundamentally, we need to start with the device. So a
13 game console versus a smartphone. The key distinction between
14 a smartphone and game consoles and other devices is that the
15 smartphone can be used anywhere, any time. And that means
16 that a consumer, no matter what time of day, no matter where
17 they are in the country, so long as they have a cellular
18 connection, can use the smartphone. And that, in fact, is
19 what people do.

20 A game console, on the other hand, is typically a fixed
21 device that is not something people carry around. There is an
22 exception in the case of Switch, which is mobile, but on the
23 other hand, doesn't have a cellular connection and, therefore,
24 while it can be moved around, it doesn't provide the
25 opportunity to use it anywhere, any time, as a smartphone

1 could. There is a fundamental difference in that dimension.

2 **Q.** And why is that difference that you just described
3 relevant to the question of market definition?

4 **A.** It's relevant to market definition because a consumer who
5 is interested in using apps at various times and various
6 places during the course of their lives, there are many, many
7 situations in which the game console, even if it had a
8 relevant app available on it, is simply not a relevant device
9 for them to use in their daily lives.

10 **Q.** Does that have any consequence on developers as well?

11 **A.** Yes. So a fundamental aspect of the developer business is
12 they need to be where the customers are. So if the customers
13 are out and about and have a demand for using an app, then
14 they need to be there. And if the only way to get to that
15 consumer at that point in time and place is a smartphone, that
16 is where they need to be.

17 **Q.** Are there other reasons that you have come to the view
18 that the distribution of apps on game consoles is not in the
19 same relevant market for these purposes as the distribution of
20 apps on iOS?

21 **A.** Yes. It's not just that the smartphone and the operating
22 system can be used anywhere any time. It's also that there
23 are unique features of the smartphone that developers can use
24 in order to provide services to consumers. The one that
25 we're -- a lot of us are familiar with is Uber. Having the

1 mobile device, having GPS and so forth, that's a real
2 convenience for consumers and, therefore, the smartphone but
3 not the game console is a relevant device for providing that
4 service to consumers.

5 **Q.** And so what are the features of the smartphone that you
6 are referring to here, for example?

7 **A.** The key ones is it's mobile, it fits in your pocket, it's
8 easy to carry around all the time. But then the other very,
9 very important one is that it has cellular capability so that
10 it works with a cellular network and, therefore, in the U.S.
11 and most parts of the world, it is connected to the internet
12 pretty much all the time.

13 **Q.** Is that true for game consoles?

14 **A.** It is not true for game consoles in two ways. The game
15 console is not mobile, and the game console also doesn't have
16 cellular connectivity. So if you did carry it around, you
17 would need to have WiFi or cellular -- you would need to have
18 WiFi or a hotspot or something in order to be able to use it
19 if, in fact, you were thinking about carrying the game console
20 around.

21 **Q.** Do those differences have any impact on the range of apps
22 that developers can write for the operating systems on those
23 devices?

24 **A.** Yes. If we just looked at what actually happens, there is
25 an enormous range of apps that have been developed for

1 smartphones and for the operating systems on smartphones and a
2 much smaller set of apps that have been developed for game
3 consoles and much more specialized ones.

4 **Q.** Let's focus specifically on games for a moment.

5 *****Have you done any investigation or analysis
6 of the extent to which games that are on iOS devices are
7 also available on consoles?

8 **A.** I have.

9 **Q.** Have you put together any data or slides on this?

10 **A.** I have.

11 **Q.** Can we take a look at that slide, please. And explain to
12 us what you found through your investigation.

13 **A.** Yes. I looked at the top iOS games in two ways, the 50
14 top iOS games based on how often they were downloaded and
15 then also the 50 top iOS games based on revenue.

16 And in both of those cases, the preponderance of those
17 games by number were not available on game consoles. So only
18 four of the top downloaded games were available on any console
19 and only seven of the top 50 revenue-generating iOS games
20 were available on any console. And the details of that by
21 console are reported in the table below.

22 **Q.** So --

23 **THE COURT:** So what are the four?

24 **THE WITNESS:** So *Fortnite* -- so, I know the answer --
25 I know part of the answer to this question for the top

1 revenue-generating iOS games. And if I can answer the
2 question for that. The ones for the top downloaded games
3 doesn't immediately come to mind.

4 **THE COURT:** So what are they?

5 **THE WITNESS:** Those would be listed in my written
6 direct, I believe.

7 **THE COURT:** So you don't know off the top of your
8 head?

9 **THE WITNESS:** As I sit here today, for the top
10 downloaded games, I do not know.

11 **THE COURT:** Okay. Are they versions of the games or
12 are they just not available at all because they are Apple
13 games, or what? Either the seven or the four.

14 **THE WITNESS:** So in the seven -- so among these games
15 that are available -- among the top games that are available
16 on consoles includes *Fortnite*, *Roblox*, and I forget the other
17 few as I'm sitting here today.

18 **THE COURT:** All right. Proceed.

19 **BY MR. BORNSTEIN:**

20 **Q.** And are the, for example, 46 games that are among the top
21 downloaded that are not on consoles, do you know whether there
22 are different versions of the game that appear on the
23 consoles?

24 **A.** They do not.

25 **THE COURT:** Can you direct me to the portion of his

1 written report, paragraph, please, where I can find this
2 information?

3 **MR. BORNSTEIN:** Yes, Your Honor. This specific
4 information, I believe, is in the -- this specific information
5 may be in the rebuttal report, but I'll get you a specific
6 page cite. I don't think I have one with me --

7 **THE COURT:** All right. Keep going.

8 **MR. BORNSTEIN:** -- right now. Okay.

9 **BY MR. BORNSTEIN:**

10 **Q.** Dr. Evans, why don't we move to a different subject.

11 I want to turn to the background of your --

12 **MR. BORNSTEIN:** Actually, you know what, Your Honor,
13 I do see it is in his rebuttal report. It's paragraph 119 of
14 the rebuttal report. It is not in the opening report.

15 **THE COURT:** I'm talking about the -- so is it in his
16 direct testimony or just in the report?

17 **MR. BORNSTEIN:** That is in the report itself.

18 **THE COURT:** So it is not in his testimony?

19 **MR. BORNSTEIN:** The specifics of the games I don't
20 believe is in his testimony, that's right. We do have a
21 document that we have in the record or will put in the record
22 that addresses this information.

23 **THE COURT:** All right. So you said written report,
24 paragraph what?

25 **MR. BORNSTEIN:** The written rebuttal report paragraph

1 119.

2 **THE COURT:** 119? Thank you. Go ahead.

3 **MR. BORNSTEIN:** We will have in the record as well
4 DX4883, which has additional information on the subject.

5 **THE COURT:** Okay.

6 **BY MR. BORNSTEIN:**

7 **Q.** So let's step back a bit to -- you mentioned that you do
8 research and scholarship on the digital economy. Can you
9 explain what you mean by that phrase?

10 **A.** Yes. The digital economy is essentially all of the
11 economic activity that takes place in some way that involves
12 an internet connection. A good example would be grocery
13 shopping now, people use Instacart to do that. Both the
14 shopper and the customer who is using Instacart has an
15 internet connection that is enabling that activity.

16 **Q.** And let's rewind about 15 years. How is it that most
17 people at that time interacted with the digital economy?

18 **A.** So 15 years ago, it was primarily personal computers,
19 generally sitting at a desk. A lot of activity involved using
20 browsers or using an application that was downloaded on a
21 personal computer that could then take advantage of the
22 connection to the internet that the computer had. And the
23 connection was probably a fixed broadband connection, although
24 even 15 years ago, WiFi was becoming popular.

25 **Q.** Has that changed in the intervening years?

1 **A.** It has changed absolutely dramatically.

2 **Q.** How so?

3 **A.** 15 years later, almost everyone has a smartphone with an
4 operating system on it that supports a diverse set of
5 applications. And the very important aspect of this is that
6 as a result of that, there's been a massive expansion going
7 back to a point I raised earlier in the time and places
8 where -- where people can use things that involve the internet
9 and where developers can supply applications that enable those
10 people to consume services, again, throughout time and
11 wherever they are.

12 **Q.** Have you done any research to quantify these developments?

13 **A.** I have. I did a lot before this case, but I've updated
14 them for the purposes of this matter.

15 **Q.** And what kinds of materials did you consult and research
16 in order to do that?

17 **A.** Standard industry sources. So, for example, the Nielsen
18 data, Comscore data. There's a very reputable think tank
19 called the Q Foundation that conducts a lot of research in
20 this area. There are various government sources; for example,
21 the FCC. And some trade groups like the global organization
22 of cellular carriers. I used diverse sources like that.

23 **Q.** And are these sources that you rely on outside of
24 litigation contexts for your work?

25 **A.** They are.

1 Q. And are they sources that economists ordinarily rely on
2 more generally?

3 A. They are sources that economists interested in this
4 particular area would rely on.

5 Q. Very good. Thank you.

6 Did you put together a slide to help illustrate what
7 you've discovered through this research?

8 A. I have.

9 Q. Let's take a look at slide 10, please. And can you
10 explain the data that you have compiled here?

11 A. Yes. Well, first of all, this is 2019 data and it is for
12 the United States.

13 2019, 83 percent of adults had smartphones. So not
14 complete penetration, but a very large portion of the
15 population had smartphones by 2019.

16 Very interesting development, which is by 2019, if we look
17 at the time that people are spending online with an internet
18 connection, as of 2019, 77 percent of that time is being spent
19 using a smartphone connected to the internet, either using an
20 app or using a browser. So most time is being spent on
21 smartphones as opposed to being spent on personal computers.

22 Q. And then of that time spent on smartphones, have you
23 looked to see how much is spent actually in an app versus on a
24 browser?

25 A. Yes. That has been the other very interesting development

1 is 89 percent of the time that people are spending online
2 using their smartphone is being spent with the app as opposed
3 to using the browser on the phone.

4 **Q.** And so by 2019, how much time did the average United
5 States adult spend actually connected to the internet using a
6 smartphone?

7 **A.** Roughly three hours a day.

8 **Q.** Three hours a day for every person -- every adult in the
9 United States, on average?

10 **A.** Well, you -- on average, yes. So on average, on average
11 U.S. adults spend three hours a day using apps or the web on
12 their -- on their smartphone, obviously. Some people -- some
13 people much less, and some people much more up to the limit of
14 the number of hours in the day.

15 **Q.** The definition of an average.

16 **THE COURT:** One hour on a personal computer, three
17 hours on a mobile device?

18 **THE WITNESS:** That is roughly correct, yes.

19 **THE COURT:** Do you take into account all the time
20 people spend -- or you probably don't -- working on PCs?

21 **THE WITNESS:** Yes. This is the consumer use of
22 personal computers. This is the consumer use of personal
23 computers and smartphones.

24 **THE COURT:** Okay. Thank you.
25

1 **BY MR. BORNSTEIN:**

2 **Q.** Is this phenomena limited to the United States?

3 **A.** No, it is not.

4 **Q.** Can you give a flavor of what is happening in other parts
5 of the world?

6 **A.** Some countries are way ahead of us. South Korea and some
7 Scandinavian countries are actually even further ahead than we
8 are in terms of the digital economy. But then a large portion
9 of the world, developing countries are rapidly catching up. A
10 great example is India where a few years ago, there wasn't
11 really much penetration of smartphones and usage, but now it
12 has just exploded. That is generally true around the world of
13 the different pace of moving the smartphone, but it is a
14 global phenomenon that is really affecting every nook and
15 cranny of the earth.

16 **Q.** What effects have these developments had on the extent to
17 which consumers access the digital economy?

18 **A.** I worry that I am repeating myself on this one. I will
19 say it again, which is there has been a massive expansion of
20 the portions of the day where people can be participating in
21 the digital economy and also the places during the day when
22 they can do that.

23 **Q.** What impact, if any, does that have on developers who are
24 looking to service those customers?

25 **A.** It goes back to the point I raised earlier, which is

1 developers have to be where the customer is. So those --
2 those are -- there are substantial increases in consumer
3 demand that developers can then tap into.

4 **Q.** Do you believe, based on your research, that Apple
5 deserves any credit for this set of developments in the
6 digital economy?

7 **A.** Well, just not any credit. I believe Apple deserves a lot
8 of credit for the creation of the iPhone and helping to create
9 a lot of the great things that are happening today.

10 **Q.** And given the growth that you've described in the digital
11 economy, how is it now that people can -- are there changes in
12 how people can access this expanded range of economic
13 activity?

14 **A.** There have been changes.

15 **Q.** What do you have in mind?

16 **A.** In one dimension, things haven't changed, and maybe it is
17 useful to level this up with that. So the thing that hasn't
18 changed is just like with Windows and Mac computers, people
19 can -- all you need is money in order to go out and get a
20 smartphone. Then you are able to use the operating system and
21 the app development platform that that supports. So as a
22 consumer, you are off and running once you've bought a
23 smartphone.

24 If you're a developer, just as in the case of Windows, you
25 can go to -- you can go to Apple and you can go to Google and

1 you can get the tools of everything you need in order to be
2 able to create apps. So that part of things is similar for
3 both consumers and developers.

4 Where it is different is after you have the Windows
5 computer or the smartphone or after the developer has created
6 a Windows app or created a smartphone app, that is where
7 things have changed.

8 **Q.** How so? How have they changed?

9 **A.** In -- it used to be -- the way they've changed is that
10 with personal computers, it's always been possible to get
11 apps, whether they're web apps or whether they are personal
12 computer apps, from a whole variety of different channels.

13 What has happened with the rise of the App Store and
14 Google Play is that there are only two channels where
15 consumers that have smartphones and developers that are trying
16 to reach those consumers, there is only one channel where they
17 can go to in order to get apps. And that has been a dramatic
18 change in the digital economy. Because now there are really
19 two gatekeepers, in effect, for getting access to the things
20 that work with the -- work with the device and work with the
21 operating system and work with the app development platform.

22 **Q.** You mentioned operating systems a few times. I would like
23 to just do some terminology-type housekeeping here.

24 Have you done research over your career on operating
25 systems?

1 **A.** Yes, I have. I've done extensive research starting about
2 20 years ago on the economics of operating systems.

3 **Q.** Have you written any books on the subject?

4 **A.** I have, with Professor Schmalensee, who I believe we are
5 going to be hearing from, and another co-author. I wrote a
6 book called Invisible Engines, where "invisible engine" refers
7 to the operating system or software platform that resides in
8 an -- in a device. Wrote that book, yes.

9 **Q.** Is there a distinction that people talk about between a
10 general purpose operating system and a special purpose
11 operating system?

12 **A.** Well, in the economic literature, it is referred to in
13 different ways. But, yes, there is a fundamental difference
14 between general purpose operating systems and specialized
15 ones.

16 **Q.** Let's break that down. What is a general purpose
17 operating system?

18 **A.** It is one that supports lots and lots of different kinds
19 of apps in the sense that once a developer has access to the
20 operating system and the relevant tools and the API and all
21 the things that go into a modern operating system, they can do
22 whatever they want. Whatever idea they have that can be
23 implemented with an app, they can do that with their -- that
24 operating system.

25 And, therefore, for general purpose operating systems, we

1 see a whole diversity of apps for all sorts of different
2 purposes, ones that, you know, a few years ago, we couldn't
3 even imagine, and ones that today we probably can't imagine
4 the ones we will see in the future.

5 **Q.** What are some examples of general purpose operating
6 systems?

7 **A.** The main ones we talk about nowadays are Windows and the
8 Mac. Historically, there have been other general purpose
9 operating systems, and talked a lot about those in the book
10 with Professor Schmalensee.

11 **Q.** Are there mobile operating systems that qualify as general
12 purpose operating systems?

13 **A.** Absolutely. There is the iOS operating system and there
14 is the Android operating system. There are also general
15 purpose operating systems in that same sense that they can
16 support many, many different kinds of apps.

17 **Q.** And based on your economic research regarding operating
18 systems, can you tell us if there is a typical way in which
19 the developers and providers of these operating systems get
20 paid and earn revenue from what they have done?

21 **A.** Yes. Typically for general purpose operating systems, the
22 developers -- I am sorry. I may have misheard your question,
23 because I thought you said developer as opposed to the
24 operating system.

25 **Q.** I apologize. I said developer of the operating system,

1 and I'm sure I caused confusion that way.

2 **A.** That caused confusion.

3 **Q.** Thank you for being careful. I will ask the question
4 again without doing that.

5 Based on your economic research into operating systems,
6 can you tell us if there is a typical business model that
7 operating system providers follow?

8 **A.** Yes, there is.

9 **Q.** What is that?

10 **A.** I call it the user pay model. That is more or less what
11 is described in the economic literature.

12 **Q.** What is that?

13 **A.** The operating system makes it as cheap and as easy as
14 possible for developers to write apps. So they typically
15 either don't charge anything to the developers to get access
16 to the operating system to create apps, or if they charge
17 something, it is a nominal -- really nominal amount.

18 And they do that because that stimulates the supply of
19 apps, which then gets people, users interested in using those
20 operating systems and the devices on which those operating
21 systems reside. And then they make their money on the user
22 side. So the more users they get, the more money they can
23 make because they have different ways of making money off of
24 the user base.

25 **Q.** Such as what?

1 **A.** So one way an operating system supplier can do that is
2 they can license the operating system they have developed to a
3 diverse group of OEMs and computer manufacturers.

4 The other way they can do it is an operating system
5 supplier could sell its own device, and then they make money
6 from the sale of that device, which includes the operating
7 system.

8 And then the third way, which is really particular to what
9 Google has done with Android, is they make money from
10 advertising, which is still user related, because the idea is
11 you get a lot of devices out there with a lot of users. The
12 users spend time on the device or run apps on the device in
13 which Google can sell advertising. And Google makes money
14 from the advertisers, but as a result of monetizing, in
15 effect, the attention that they are getting from the users.

16 **Q.** Are there any exceptions to this user pay model among
17 major general purpose operating systems?

18 **A.** Not that I have ever seen.

19 **Q.** Are there any differences to this business model among any
20 special purpose operating systems?

21 **A.** Yes, there is.

22 **Q.** What do you have in mind?

23 **A.** Well, the big exception that -- the big difference that
24 the economic literature has identified for a long period of
25 time are game consoles which follow a very, very different

1 business model.

2 **Q.** What is the business model that the economic literature
3 has recognized that game consoles follow?

4 **A.** It is really the flip side of what I just talked about.
5 In the case of game consoles, the consoles themselves are sold
6 generally at break even or really oftentimes at a loss in
7 order to -- in order to stimulate the number of consoles that
8 are out there. And then the game consoles --

9 **THE COURT:** Dr. Evans, can you tell me where in the
10 record we actually have evidence of that fundamental
11 proposition?

12 **THE WITNESS:** Yes. So I'm confident that it is in my
13 written rebuttal testimony --

14 **THE COURT:** Then I take it you've seen the records
15 from Microsoft that -- and Sony and Nintendo that prove those
16 facts?

17 **THE WITNESS:** The only one where I have -- with
18 respect to current knowledge on this topic that is at the
19 level of specificity that you've just raised, the one evidence
20 I've seen is the evidence that, as I understand it, has been
21 submitted by Microsoft in this case.

22 **THE COURT:** So you only have seen -- you've
23 personally seen it?

24 **THE WITNESS:** I have.

25 **THE COURT:** So you've seen evidence from Microsoft,

1 but you've seen no evidence from Sony and you've seen no
2 evidence from Nintendo?

3 **THE WITNESS:** That's correct, with the qualification
4 that the document I saw from Microsoft gave Microsoft's
5 estimates of what they understood the profit margin to be for
6 Nintendo Switch and for Sony PlayStation in addition to the
7 Xbox.

8 **THE COURT:** Because I've heard this now a number of
9 times.

10 **THE WITNESS:** Yes.

11 **THE COURT:** But we are in a court of law, and in a
12 court of law, you need facts. So I don't know whether this is
13 based on your kind of understanding -- a generic understanding
14 of what is out there like many other people or whether I'm
15 actually going to be able to verify this theory that I've
16 heard now multiple times.

17 **THE WITNESS:** If I could -- so let me start with the
18 most specific and then maybe back up a little, if I could.

19 With regard to my current knowledge of the facts as of
20 today at the level of knowing for a fact what the profit
21 margins are and the magnitude of the subsidies, if there are
22 any, my knowledge of that comes from the document that I just
23 indicated.

24 **THE COURT:** Okay. So what I would like to get is the
25 document reference, Mr. Bornstein. Even though we don't need

1 to mention the specific, I do want the document reference.

2 **MR. BORNSTEIN:** I don't have the document reference
3 to give you right now, Your Honor, but obviously we will get
4 it to you promptly.

5 **THE COURT:** All right. Thank you. You may proceed.

6 **BY MR. BORNSTEIN:**

7 **Q.** To follow up on the Court's question, what did you base
8 your -- or have you based your scholarship on, on this subject
9 of the different business models pursued by these different
10 operating systems?

11 **A.** I based it on a number of sources. So to begin with, my
12 work in this area really started back in 2003, 2004 when I
13 started work on Invisible Engines. And at that time, I was
14 working also as a consultant to Microsoft and had access to
15 the Microsoft Xbox people, who told me what they did and their
16 understanding of how the business operated.

17 Subsequent to that, the topic of this business model in
18 video game consoles has been discussed extensively in the
19 literature over time because it is -- because it is so unusual
20 for operating systems.

21 Now, what I can't do as I sit here on the stand is
22 identify the underlying source material that people -- that
23 economists have relied on to make that judgment. So I
24 wouldn't be able to say what that is, but I can say that the
25 proposition the game consoles are sold at cost or below cost

1 is a noncontroversial point in the economic literature that I
2 have seen on this topic.

3 **Q.** Let me move to a different subject, also to get some
4 terminology clarified, which is you used the phrase in your
5 written testimony "app distribution." Can you just explain
6 what you mean by that phrase?

7 **A.** Yes. At the simplest level, an app developer wants to get
8 their app in the hands of consumers, and the consumers want to
9 get their hands on apps that are useful to them. There has to
10 be a distribution mechanism for that to happen. And that
11 is -- that is the process of app distribution, connecting that
12 developer with an app to the consumer who wants an app.

13 **Q.** Is there a distinction between app distribution and the
14 operating system?

15 **A.** Absolutely.

16 **Q.** What is that distinction?

17 **A.** So the operating system has an app development platform
18 which enables developers to create apps and it enables
19 consumers with a -- with that operating system to then use
20 those apps. That is what an operating system like Windows
21 and iOS and so forth does as an operating system.

22 App distribution is something that occurs later and
23 continuously. And that is an activity of developers who
24 created an app wanted to have distribution channels to get
25 their apps into the hands of consumers. So it is a -- that is

1 a retail or store-type activity whereas the operating system
2 is a software platform technology business.

3 **Q.** Is this distinction you've just described relevant in any
4 way to the analysis you've done in this case?

5 **A.** Yes, it is.

6 **Q.** How so?

7 **A.** It's relevant to the analysis in this case because Apple
8 has -- the conduct at issue in this case concerns app
9 distribution and it particularly concerns Apple's decisions on
10 the app distribution side to cut off certain channels of app
11 distribution.

12 **Q.** Is that necessarily an anticompetitive act by Apple?

13 **A.** It is not necessarily an anticompetitive act. One needs
14 to do -- look at facts and do analyses in order to make a
15 determination of that as an economist, so it is not
16 necessarily anticompetitive.

17 **Q.** Well, to that end, let me ask you to take a look at
18 slide 12, which is a slide taken directly from the opening
19 statement slides from Apple's counsel.

20 And I take no responsibility for the picture that they
21 have selected of you.

22 Can you -- do you recognize the publication there that is
23 attributed to you?

24 **A.** Yes, that is a --

25 **Q.** Sorry. Just for the record, Vertical Restraints in a

1 Digital World, is that something you wrote?

2 **A.** Yes, that is a paper I wrote. It's based on a
3 presentation I gave at the Swedish Competition Authority at
4 the end of 2019, and it's published in a book that I'm
5 actually one of the editors of.

6 **Q.** And is that sentence that is quoted there an accurate
7 quote from the article that you wrote?

8 **A.** Yes, it is.

9 **Q.** What was your reaction when you saw this slide?

10 **A.** My reaction was that it would be a useful summary of how I
11 think about the antitrust analysis of vertical restraints if
12 it included the next sentence.

13 **Q.** The next sentence?

14 **A.** The next sentence.

15 **Q.** Let's see if we can find out what the next sentence is
16 that was omitted from the slide. Turn to PDX42 that we will
17 introduce for identification which is in your binder.

18 **A.** I see it.

19 **Q.** Can you tell the Court what that is, PDX42?

20 **A.** I am sorry. You want me to consult my binder?

21 **Q.** Yes, please do.

22 **A.** Yes. This is a copy of the article in the published
23 volume.

24 **Q.** Let me ask you to turn to page PDX42.30. It is page 62 of
25 the underlying publication.

1 **A.** Yes, I have it.

2 **Q.** If you look at the second-to-last full paragraph on the
3 page, the very last sentence, is that the quote that Apple's
4 counsel put in their opening statement slides?

5 **A.** Yes, it is.

6 **Q.** And it says: There isn't much controversy that Apple's
7 rules have enabled it to create a high-quality app ecosystem
8 for the iPhone. Correct?

9 **A.** That's correct.

10 **Q.** Can you please read for the Court the very next sentence
11 that Apple omitted from the slides?

12 **A.** Yes. That doesn't mean, however, that Apple couldn't
13 abuse those rules.

14 **Q.** Thank you, sir. So let's proceed to dive --

15 **THE COURT:** Mr. -- Dr. Evans, do you conclude in this
16 article that they did abuse the rules?

17 **THE WITNESS:** No, that is not the purpose of the
18 article, Your Honor. The purpose of the article was to
19 exposit how to think about vertical restraints in the digital
20 economy.

21 So what we just saw is one of three case studies that I
22 provided in the article. And in each case, I really did not
23 intend to draw any conclusion, it was more instructional.

24 So in each case, I laid out the procompetitive explanation
25 for the practice I was analyzing and then I also explicated why

1 it could be anticompetitive without drawing a conclusion in
2 the article. It was more of an instructional article, as I
3 said, to show how to go about thinking about this topic.

4 **THE COURT:** Thank you. In any of these articles --
5 in this article, do you ever address the overlay with patent
6 law and the kind of monopoly on a -- you know, 20 years of
7 return on your intellectual property? Do you ever address
8 that?

9 **THE WITNESS:** I have addressed that quite a bit in my
10 scholarly writings. I haven't addressed it in this specific
11 article.

12 **THE COURT:** Thank you. Proceed.

13 **MR. BORNSTEIN:** Thank you, Your Honor.

14 **BY MR. BORNSTEIN:**

15 **Q.** Did you put together a slide that just summarizes the
16 opinions that you've reached regarding the restrictions on app
17 distribution that are at issue in this case?

18 **A.** Yes. I did.

19 **Q.** Let's take a look at slide 13.

20 **THE COURT:** Were you offering 42?

21 **MR. BORNSTEIN:** I am not. It was just for
22 identification.

23 **THE COURT:** Actually, it is admitted.

24 **MR. BORNSTEIN:** PDX42, I don't believe, is.

25 **THE COURT:** This is a demonstrative.

1 **MR. BORNSTEIN:** Correct, Your Honor.

2 **THE COURT:** Okay. Go ahead.

3 **MR. BORNSTEIN:** Thank you.

4 **THE WITNESS:** Would it be possible for me to take
5 just a quick glass of water?

6 **MR. BORNSTEIN:** That is up to the Court.

7 **THE COURT:** You may.

8 **THE WITNESS:** Thank you.

9 **MR. BORNSTEIN:** Thank you, Your Honor.

10 (Pause in the proceedings.)

11 **THE WITNESS:** I've had to learn not to drink through
12 the mask.

13 **MR. BORNSTEIN:** I've made that mistake, except when I
14 did it, it was coffee. Not a very good scene.

15 **THE WITNESS:** Okay. Thank you very much.

16 **BY MR. BORNSTEIN:**

17 **Q.** All right. Can you just briefly summarize what the
18 opinions are that you reached regarding the app distribution
19 restrictions at issue in this case?

20 **A.** Yes. To begin with, I concluded that the relevant
21 antitrust framework as an economic matter was the
22 foremarket/aftermarket distinction. Then within that
23 framework, I concluded that the relevant foremarket consists
24 of smartphone operating systems and that Apple has market
25 power -- substantial market power in that market.

1 Q. Can you tell us what you mean by a foremarket/aftermarket
2 framework?

3 A. Yes. Just briefly, a foremarket involves getting
4 something generally -- let me just give you an example. It is
5 easy to describe with an example.

6 Q. Sure.

7 A. Printer and toner. So the foremarket is a consumer buys
8 the printer. That is at a point in time it is a durable piece
9 of equipment that they are going to have for a while. And
10 then after they have that printer, they have the need and the
11 opportunity to buy toner for that printer. Those sales occur
12 in the aftermarket, where the terminology there is it is
13 occurring after the purchase of the initial product.

14 Q. All right. And with reference to slide 14 to illustrate
15 your point, can you tell us how that framework, in your
16 view -- or why that framework, in your view, applies in this
17 case?

18 A. Yes. So in this case, I view the foremarket as the
19 decision to get a smartphone operating system. And that
20 generally involves the decision to get a smartphone that has
21 that smartphone operating system installed. So that is the
22 decision. And then I believe I'll discuss later that the
23 decision to use the smartphone operating system, that tends to
24 persist.

25 So that's the foremarket where the consumer is using a

1 particular smartphone operating system.

2 **Q.** What about on the developer side?

3 **A.** On the developer side, it is the same story. At a point
4 in time, a developer is creating an app that works with a
5 particular operating -- with a particular smartphone operating
6 system.

7 **Q.** And then on the consumer side, what's the aftermarket?

8 **A.** So after the consumer has a smartphone and operating
9 system to support apps, they can install apps and they can do
10 that for a long time -- a long time with that device and any
11 subsequent device they get with the same operating system.

12 **Q.** Then on the developer side, what is the aftermarket?

13 **A.** The developer's already created an app, so the developer
14 has the opportunity over time to take that app and distribute
15 it to the consumers that have those smartphones, but it is
16 taking an app that's already been developed and then after
17 that, it has the opportunity to make it available to consumers
18 over a period of time.

19 **Q.** So you testified here and in your written direct that the
20 foremarket that you've defined is smartphone operating system?

21 **A.** That's correct.

22 **Q.** To help understand how you got there, can you just briefly
23 explain -- briefly explain what the purpose is of defining a
24 market in the first place?

25 **A.** The purpose of defining a market is to ultimately provide

1 information ultimately to the Court, but to provide
2 information for the Court and the economists doing an analysis
3 of the substitution options available to consumers in the
4 market and to help understand the extent to which those
5 substitutes provide the constraints on different suppliers,
6 including the supplier who is at issue in the case, to raise
7 the prices.

8 **Q.** And in identifying substitutes for smartphone operating
9 systems, what did you look at? And it may be helpful to do it
10 by reference to slide 15.

11 **A.** So where I started from in terms of thinking about
12 potential suppliers is I started with the smartphone device
13 itself because that device is what the operating system sits
14 on and then provides services to consumers and developers. So
15 I wanted to start by understanding the features of that
16 device.

17 And I think I've already really identified the key ones
18 here that are listed here in the slide. But the key ones to
19 keep in mind is that it is mobile, and it has a cellular
20 connection that provides that anywhere, anytime productivity.
21 And then, furthermore, has various features included on the
22 phone that are useful to consumers and ultimately developers
23 when people are out and about doing things.

24 **Q.** We also discussed the differences between smartphones and
25 game consoles. I don't propose to repeat that discussion.

1 But have you seen any quantitative data that was instructive
2 to you about console ownership and smartphone ownership as you
3 considered substitution here?

4 **A.** Yes, I have.

5 **Q.** And what is that?

6 **A.** I believe I have a slide on this.

7 **Q.** If you do --

8 **A.** Okay.

9 **Q.** -- it may not be with us in court. We had so many slides,
10 we had to eliminate some so we could get through this in a
11 reasonable time.

12 **A.** Okay. So I have looked at data on this. And what I have
13 determined is that almost everyone who has a game console has
14 a smartphone. And what that tells me is that if game consoles
15 were good substitutes for smartphones, people wouldn't need
16 the smartphone.

17 **Q.** So having spoken about game consoles, let's spend just a
18 minute on personal computers.

19 Have you assessed whether the operating systems in
20 personal computers are a meaningful substitute for the
21 operating systems on smartphones?

22 **A.** I have. Frankly, that is a closer call than game
23 consoles, because the operating system on personal computers
24 can support a lot of apps.

25 But in this case, I've also concluded that the operating

1 system on personal computers -- in personal computers don't
2 provide a good substitute. It goes back to the concept I
3 talked about earlier, which is for a lot of the things that
4 consumers want to do and can do now with smartphones, it is
5 not possible to really do with a personal computer just
6 because of the lack of portability, lack of the cellular
7 connection and so forth.

8 So that is a big difference that basically makes it not
9 possible for personal computers and their operating systems to
10 generally be a good substitute for smartphones and the apps on
11 smartphones.

12 As with everything, nothing is all or nothing, because
13 obviously sometimes people can engage in substitution, but by
14 and large, personal computers are just not a meaningful
15 substitute for smartphones for the full range of things that
16 people can and want to do with them.

17 **Q.** And by people, I assume you mean consumers?

18 **A.** By people, I mean consumers.

19 **Q.** What about on the developer side of the market that you've
20 defined?

21 **A.** On the developer side, it is the same story for two
22 related reasons which tie back to what I just talked about.

23 So the developer, again, needs to be where the customer
24 is, but they also need to be able to provide the services that
25 the customer wants when they want them. So personal computers

1 are not a good substitute for smartphone operating systems
2 from the developer standpoint because they can't reach the
3 consumer for a good portion of the time the consumer wants to
4 use an app on a smartphone. And they, furthermore, don't have
5 as access to a variety of features on smartphones that
6 consumers want to use. So there are services that developers
7 can't offer at all or nearly as well on an operating system on
8 a personal computer versus a smartphone.

9 **Q.** Did you put together a slide that summarizes your
10 assessment of the qualitative evidence you relied on to define
11 the market for smartphone OSes?

12 **A.** Yes, I have.

13 **Q.** Let's look briefly at slide 16. And I don't propose to
14 have you read everything on the slide, but is this an accurate
15 summary of your conclusions with respect to the qualitative
16 evidence in defining this market?

17 **A.** Yes, it is.

18 **Q.** Was this qualitative evidence, in your mind, sufficient to
19 support a conclusion that smartphone operating systems are the
20 right foremarket here?

21 **A.** Yes, it did. I don't believe it was a close call. I
22 think the qualitative evidence, what we know about
23 smartphones, how they are used, how developers interact with
24 them, I think it's very clear that other operating systems do
25 not -- are not meaningful substitutes for smartphone operating

1 systems.

2 Q. With that stated, did you do any quantitative analysis to
3 analyze this question?

4 A. Yes. I double-checked that conclusion using a step test
5 or a hypothetical monopolist test.

6 Q. Are the details of those tests reflected in your written
7 direct testimony?

8 A. Yes, they are.

9 Q. What conclusion did you reach about the geographic market
10 to be applied here in the foremarket?

11 A. Global market with the exception of China. So global
12 minus China.

13 Q. Is the basis for that reflected in your written direct
14 testimony?

15 A. Yes, it is.

16 Q. Let's talk about market power.

17 What did you conclude as to whether or not Apple has
18 market power in the smartphone operating foremarket?

19 A. I concluded that Apple has substantial market power in the
20 smartphone operating system market.

21 Q. And --

22 A. Just a pet peeve from economists. So all firms have some
23 market power, so for antitrust, we can only talk about firms
24 having substantial market power.

25 Q. I stand pet-peeved.

1 Did you put together a slide summarizing the bases on
2 which you reached that conclusion?

3 **A.** Yes, I did.

4 **Q.** Let's take a look at slide 17. Just briefly, Dr. Evans,
5 can you summarize the bases on which you reached the
6 conclusion that Apple has market power in this market? And
7 then we can come back and dive in on a few of these.

8 **A.** There are just two choices: IOS and Android. So it's a
9 duopoly. Second of all, the app development platform for
10 iOS is very important in terms of accounting for the extent
11 to which users and developers want to interact is measured by
12 various forms of usage.

13 **Q.** Dr. Evans, can I interrupt you for just one second? Would
14 you mind bringing the microphone just a touch closer. The
15 court reporter is struggling.

16 **A.** Is this better?

17 **Q.** Yes.

18 **A.** I am sorry.

19 **Q.** All right. So you had gone through the duopoly and the
20 share of smartphone usage. Can you discuss briefly the
21 remaining three items on your slide?

22 **A.** Yes. iOS and Android as operating systems are quite
23 differentiated from each other. The fourth is that there are
24 barriers to entry getting into the smartphone operating system
25 market. And then, finally, it's quite costly for consumers to

1 switch from one operating system to another and, in
2 particular, to switch from iOS to Android.

3 Q. I would like to touch on just two of these. Are they all
4 spelled out in your written direct testimony?

5 A. They are.

6 Q. On the first one about the duopoly, did you review
7 quantitative evidence regarding whether there is a duopoly in
8 this market?

9 A. I have.

10 Q. And did you put a slide together on that?

11 A. I did.

12 Q. Let's take a look at slide 18. Can you tell us what we
13 see here?

14 A. Yes. Specifically what is shown here is the sale of
15 smartphones that have the iOS or Android or other operating
16 system installed on them. That is tracked from 2008 to 2019.

17 Q. And what does it show about the share for the past several
18 years?

19 A. Really since about 2013, 2014, iOS and Android have
20 essentially a hundred percent share as measured by consumers
21 actually purchasing smartphones with those operating systems
22 installed.

23 Q. This slide indicates that we are looking at data that's
24 global, excluding China.

25 Have you also reviewed data that's limited to the United

1 States?

2 **A.** I have.

3 **Q.** What does that show?

4 **A.** It shows the same. It shows the same path. Essentially,
5 what has happened here is there were a few other smartphone
6 operating systems on the market at the beginning of the
7 period, but they all exited. There had been a couple of entry
8 attempts that haven't worked, and the result of that is for a
9 very long period of time, close to a decade, there are really
10 only two operating systems in play: IOS and Android.

11 **Q.** This slide has Android about 60 percent globally,
12 excluding China, and iOS at about 40 percent globally,
13 excluding China. Do you know what those data are for the
14 United States?

15 **A.** I do. I don't have the specific numbers planted in my
16 head. They are in my direct testimony. But the iOS, the
17 share of phone sales by revenue for iOS in the U.S. is north
18 of 50 percent now.

19 **Q.** So let's skip ahead to the last of the items that were in
20 your summary, which was switching costs. Can you explain,
21 first of all, what you mean, generally speaking and briefly,
22 by switching costs here?

23 **A.** Yes. In -- as a general matter, switching costs refer to
24 the obstacles of moving from one product to another product.
25 In this particular context, I think of it in two ways: One is

1 consumers incur what I'll characterize as sunk costs --

2 **Q.** Did you say sunk?

3 **A.** Sunk, as in S-U-N-K. Sunk costs.

4 -- when they get into a particular operating system
5 ecosystem. They have to buy a phone, which is a durable piece
6 of equipment, expensive. They have to spend time learning how
7 to use the operating system and the other things that go with
8 it, and while this is an aspect of time, there are also brain
9 cells. There is the learning process for an operating system,
10 the tactile feel of the operating system and so forth that is
11 also something that people -- I used the term "sunk cost," but
12 let's say invest in upfront when they start using an operating
13 system.

14 **Q.** You said you think about this in two ways. The first was
15 sunk costs. What is the second?

16 **A.** So the sunk costs are costs that are switching costs
17 because consumers have to re-incur them if they move to
18 another operating system. But then there is another category
19 where it is not so much sunk costs, it's just that there are a
20 number of things that are just obstacles in moving from one
21 operating system to another.

22 **Q.** Have you put together and summarized what the sunk and
23 switching costs are that you have identified in this market?

24 **A.** Yes, I have.

25 **Q.** Can we just take a look briefly at -- starting on

1 slide 19. I won't ask you to read the whole slide, but if you
2 can just briefly identify particular sunk or switching costs
3 that you found significant, that would be helpful.

4 **A.** So just very briefly, we've already talked about buying a
5 new smartphone. If you switched -- if you want to switch to
6 another ecosystem, want to switch from iPhone to Android, you
7 have to buy an Android phone, replace your iPhone with that?

8 When you do that, there are, for iOS users, potentially
9 important apps that you can't use anymore, and you lose the
10 data from them and so forth. An example of that is
11 iMessage. Transferring data in apps. So, for example, if I
12 have my photos stored in iCloud, then those aren't going to
13 transfer over.

14 There is the whole issue of -- it is not impossible, but
15 there's the whole issue of learning a new set of user
16 interfaces and controls for the phone. So those are good
17 examples for this first slide.

18 **Q.** Okay. And are there any worth highlighting on the second
19 slide here?

20 **A.** Yeah, sure. So when -- one of the other aspects of an
21 operating system ecosystem is there are generally other things
22 that are complementary to it under accessories and peripheral
23 devices and so forth.

24 So in the case of the iPhone, a person may have an Apple
25 Watch or they may have Air Pods. In the case of the Apple

1 Watch, that does not really transfer over at all or very well
2 onto Androids. Air Pods, my understanding is not very well
3 either.

4 **Q.** Have you discussed these various switching costs in more
5 detail in writing in your written testimony?

6 **A.** Very much so.

7 **Q.** How are the switching costs relevant to the question of
8 market power?

9 **A.** They are relevant to the issue of market power because
10 they provide information on what consumers who already have an
11 iPhone are using the iOS operating system and have apps
12 would consider doing in response to a price change.

13 And perhaps the best way to see this is consider the
14 reverse situation where it is very easy to switch between
15 operating systems and devices and so forth. If that was the
16 case, then if the price of iOS app distribution services
17 went up or it became too inconvenient -- more inconvenient to
18 use iOS distribution services, then you can imagine in the
19 absence of switching costs and the absence of the things I've
20 talked about here, people say, oh, gee, I'll just dump my
21 iPhone and get an Android phone.

22 The importance of these switching costs is that consumers
23 do a much different calculation. Their calculation is it
24 becomes more costly to -- for me to use iOS app distribution
25 or the quality of iOS app distribution has deteriorated.

1 Switching to an Android phone isn't such a good option for me
2 because that's an expensive, costly thing for me to do.

3 And the result of that is that switching between
4 ecosystems isn't really much of a competitive constraint on
5 the iOS app distribution market.

6 **Q.** The answer that you just gave was from the perspective of
7 consumers.

8 **A.** Yes.

9 **Q.** Can you explain with reference to slide 21 how this all
10 impacts developers in the market?

11 **A.** Yes. So developers are in a much -- are in a different
12 situation. So smartphone users, to use an economic term from
13 platform economics, they single home. And that simply means
14 that they're only using one platform. So in this case, people
15 are an iOS user or they are an Android user, but they are
16 not both.

17 So that's single homing.

18 Developers, on the other hand, they engage in multihoming.
19 The reason they do that, again, is they need to be where the
20 customers are. So developers, they have to create an iOS
21 app in order to reach those iOS users and they have to have
22 an Android app to reach the Android users.

23 **Q.** What does that mean for the extent to which Apple does or
24 does not have market power over those developers?

25 **A.** To the extent that the users don't switch much, that means

1 that the developers pretty much have to keep doing what they
2 are currently doing.

3 So if there was an increase in price and few or no users
4 actually switch from iPhones to Android phones, from iOS
5 to Android operating systems, then developers have to do what
6 they have always done, which is they have to make sure that
7 they have their iOS app available for the very large group
8 of iOS users.

9 **MR. BORNSTEIN:** Your Honor, I'm going to move to a
10 new topic now. We still have five, seven minutes before the
11 typical lunch break. I am happy to continue. I just wanted
12 to see if it would be more useful for the Court to break now.
13 Either way is fine.

14 **THE COURT:** We can. I just have a question back on
15 the duopoly market.

16 It looks like, according to your chart, there were a
17 number of -- a number of other players obviously in 2009 up
18 until about -- when would you say that Android and iOS had
19 antitrust market share, in your view?

20 **THE WITNESS:** I want to make sure I understand the
21 question, Your Honor. Are you asking me at what --

22 **THE COURT:** If you look at this chart, right, back in
23 2008, you would not claim that they -- that those two devices
24 control the market, do you?

25 **THE WITNESS:** That's correct. I think I understand

1 what you are asking.

2 **THE COURT:** It wasn't until -- so that is what I am
3 trying to figure out. At what point do you think it shifted?

4 **THE WITNESS:** Given the market dynamics and the
5 expectations of people in the market, it really shifted
6 significantly by about 2010. If I can explain why?

7 **THE COURT:** Okay. Go ahead.

8 **THE WITNESS:** What happened after the iPhone and
9 Android phone came in is developer -- developer interest
10 switched almost entirely to iPhones and Android phones. So
11 they essentially really weren't developing for the other
12 smartphone operating systems on the market; for Symbian, for
13 Blackberry and Palm. They knew that Android and iPhone were
14 eventually going to take over, so they shifted all of their
15 development effort, the preponderance of it, over to iOS and
16 to Android.

17 And from about 2008 to maybe about 2010, 2011, there were
18 still some people that really weren't ready to switch over.
19 Now I'm talking not about developers, but I'm talking about
20 people. There were consumers who still weren't ready to
21 switch over to iPhones and Android in the 2008 to 2010
22 period, because Blackberry users like to be able to use the
23 keyboard and people weren't sure about the switch. But by
24 2010, there was a dramatic movement really of people over to
25 these new devices.

1 And the third thing that is going on during this period of
2 time, which is leading to the consolidation of the market
3 with iOS and Android, is cellular connectivity. The power
4 of the cell networks is vastly improving, and the result of
5 that is that being able to use all those apps on iPhones and
6 Android phones become -- became so much easier by about 2010,
7 2012. All those things led to really the consolidation of the
8 business into iOS and Android by roughly the 2010 to 2012
9 period.

10 **THE COURT:** All right. Thank you. Let's go ahead
11 and take a 40-minute break. We will stand in recess until
12 1:10.

13 **MR. BORNSTEIN:** Thank you.

14 (Recess taken at 12:31 p.m.; resumed at .m.)
15

16 *****.

17 **THE COURT:** You may have a seat, Dr. Evans. Thank
18 you.

19 Are you ready, Mr. Bornstein?

20 **MR. BORNSTEIN:** I am sorry, Your Honor?

21 **THE COURT:** Are you ready?

22 **MR. BORNSTEIN:** Yes.

23 **THE COURT:** Let's go back on the record. The record
24 will reflect the parties are present. Mr. Bornstein, you may
25 continue.

1 **MR. BORNSTEIN:** Thank you, Your Honor.

2 I'd just like to start by giving the Court a citation that
3 you had requested.

4 **THE COURT:** Thank you.

5 **MR. BORNSTEIN:** There is in Dr. Evans' opening
6 testimony, the written testimony that you have, at
7 paragraph 53, romanette iii is the identification of the four
8 games that the Court had asked about that are on the consoles.

9 **THE COURT:** Okay. Great. Thank you.

10 **MR. BORNSTEIN:** Thank you.

11 May I proceed, Your Honor?

12 **THE COURT:** You may.

13 **MR. BORNSTEIN:** Thank you.

14 **BY MR. BORNSTEIN:**

15 **Q.** All right. Dr. Evans, let's turn to a new subject after
16 lunch, which is your opinions concerning the iOS app
17 distribution market. First question is, does the iOS app
18 distribution market include in-app purchases?

19 **A.** It does not.

20 **Q.** Explain why, please.

21 **A.** The iOS app distribution market refers to distribution of
22 the whole process that a store does of getting -- moving
23 product basically. So for the App Store and for iOS app
24 distribution, that involves the whole process of enabling app
25 users to search and discover apps, to basically find them. It

1 involves that same process from the standpoint of the
2 developers, the process of making their apps available in a
3 way where app users can potentially find them.

4 And after that matchmaking process takes place where the
5 consumer finds the app and the developer, you get the
6 potential customer, then there is the whole process of
7 delivering the app to the consumer, which is down- -- the
8 ability of the consumer to download and install the app from
9 the store and then later on to be able to update it. So
10 that -- that is what I refer to as app distribution services.

11 **Q.** What is the in-app purchase function?

12 **A.** In-app purchase is now that the consumer has an app and
13 the developer has a relationship with that consumer, in-app
14 purchases, as a general matter, are the transactions that take
15 place later on between the developer and its customers. So
16 those are separate from the distribution services.

17 **Q.** From the distribution of the app itself?

18 **A.** That's correct.

19 **Q.** Okay. With that definition of app distribution in mind,
20 please explain how you began, first step in defining this
21 market.

22 **A.** So the first step in defining this market or any market is
23 starting with the supplier at issue, which is the App Store,
24 and the distribution product offered by the App Store and
25 considering the potential substitutes in a market for the App

1 Store.

2 Q. Do we have a slide that lays out the way you thought about
3 considering substitutes?

4 A. Yes, we do.

5 Q. Let's take a look at that. Slide 22. I would ask you to
6 just explain briefly what each of these potential substitutes
7 is, and then we can dive in and touch on things a little bit
8 more detailed.

9 A. So let me go through this from the perspective of the
10 consumer, the user of apps.

11 So the first one is app distribution on non-smartphone
12 operating systems. So one possible source of substitution
13 that is available for an app user -- for iOS app user is the
14 possibility that there is a similar version of that app that's
15 available on another operating system; in particular, for
16 computers or for game consoles. So that is a possibility that
17 the consumer could substitute to that other operating system
18 if they didn't like what was going on in iOS app
19 distribution.

20 Q. Okay. So that is number one. What about number two?

21 A. The second possibility is that they substitute to Android.
22 And that can happen in two ways, one of which I think is
23 trivial and the other one is definitely worth discussing.

24 So the trivial way is an iOS app user could say -- or an
25 iOS user could say, hey, maybe I will go to the Google Play

1 store and see if I can get an iOS app from them. That's
2 technically not possible. The Google Play store doesn't
3 distribute such an app, so that is not a possibility.

4 **Q.** Sorry, Dr. Evans. Let me just ask you to slow down just a
5 touch. I have seen a couple of head nods from the court
6 reporter.

7 **A.** Okay. Thank you. Sorry.

8 **Q.** Please go ahead.

9 **A.** The other possibility is something that is definitely
10 worth investigating. So an iOS user who is not happy
11 because of prices or quality with iOS app distribution
12 could, going back to the foremarket, make a decision to get
13 rid of their iPhone, to disengage from the iOS ecosystem and
14 get an Android phone and to become part of that ecosystem and,
15 therefore, at that point be able to go to Google Play or an
16 Android store and get an app in that way. So that's -- that's
17 the main thing I cover under the second category.

18 **Q.** Okay. And, briefly, what about number three?

19 **A.** Well, the third category is to analyze a relevant
20 antitrust market. We need to look at it in the absence of the
21 conduct -- we need to look at it in a competitive situation.

22 So in the absence of Apple's conduct, we need to consider
23 the possibility that there would be other iOS app
24 distributors operating in the market and that those other
25 iOS app distributors would be potential substitutes from the

1 standpoint of the customer to -- to the App Store. That is
2 the third category.

3 **Q.** Let's take each of these in turn. We will spend a little
4 more time on some than on others.

5 First, in terms of app distribution on non-smartphone
6 OSes, what did you conclude about whether that is a
7 meaningful substitute for distribution of apps on smartphone
8 OSes -- excuse me, on iOS devices?

9 **A.** I concluded that apps on personal computers and apps --
10 that -- that the distribution of apps for personal computers
11 and the distribution of apps for game consoles were not a
12 meaningful substitute from the standpoint of the consumer or
13 the developer, really for all the reasons that we talked about
14 in going through the issues in the foremarket.

15 **Q.** Let me ask about one additional possibility that we
16 haven't covered already in the foremarket discussion.

17 What about the possibility that a developer has a similar
18 app that runs on a game console, for example, and a user goes
19 to the game console, spends some money, makes a purchase
20 there, and then comes back to her iOS device and uses what
21 she's purchased on the iOS device. Is that a form of
22 substitution in the app distribution market?

23 **A.** It is not really a form of substitution in the app
24 distribution market for the obvious reason that in order to
25 use that purchase on their iOS device, they have to have the

1 app. So they still have to be participating in the app
2 distribution market in order to get that app on their iPhone.

3 **Q.** So let's try that with an example. Go ahead.

4 **A.** Sure. Let me give you the example of Netflix. So I can
5 sign up for a subscription to Netflix on my personal computer.
6 In fact, I think that is how I did it. But if I want to watch
7 Netflix while I am on the road on my smartphone, I have to be
8 able to find the Netflix app and download it on my iPhone.
9 That's the service that is provided by app distribution.

10 **Q.** Let's move, then, to app distribution on Android, and I
11 will pass what you call the trivial issue and turn to the one
12 that you considered more significant. Explain quickly how
13 Android could -- a competition between Android and iOS could
14 impose potentially a competitive constraint on Apple's conduct
15 with respect to distributing apps on the App Store.

16 **A.** Well, the answer to that goes back to something I said
17 earlier, imagining a situation where there really aren't any
18 sunk costs in this business, where there aren't any switching
19 costs, there are a number of different options available to
20 the consumer.

21 In that kind of situation, if they -- if an iPhone user
22 wasn't happy with app distribution, they possibly make the
23 decision, easily make the decision to say, I'll get rid of my
24 iPhone and just go get an Android phone.

25 **Q.** And is that the real world?

1 **A.** That is not the real world.

2 **Q.** Have you put together a slide for us that articulates the
3 ways in which the real world is different?

4 **A.** I have.

5 **Q.** Let's take a look at slide 23. Can you explain what it is
6 that you considered significant in this respect?

7 **A.** Yes. So these all go back to concepts that we have
8 already talked about with respect to the foremarket. There
9 are only two choices in the foremarket. So there is not
10 intense competition. There is just a choice between Android
11 and iOS. Second, the sunk cost and the switching cost make
12 it very difficult for an iOS user to switch to Android for
13 the purposes of getting better distribution, let's say, on the
14 Android device.

15 **Q.** What is the third issue about low relative cost of app
16 distribution?

17 **A.** The basic idea is in the foremarket, if -- if -- once
18 again, let me take kind of the opposite example in order to
19 illustrate it. If the -- if the product in the foremarket
20 wasn't really that expensive, but the costs in the aftermarket
21 were really big, then in making the decision to buy the
22 foremarket product, you would really worry about the -- and
23 really take into account the cost of the product being bought
24 in the aftermarket.

25 In the opposite case where the foremarket product is very

1 expensive, when a consumer is making a decision about what to
2 buy, the cost of what they are going to spend in the
3 aftermarket is a small portion of it and is going to be a
4 small portion of the consumer's decision on making -- making
5 that choice.

6 **Q.** How does that apply here?

7 **A.** It turns out here that the -- the cost of -- the cost of
8 apps in the aftermarket is -- the cost of app distribution in
9 the aftermarket is low relative to the cost of the product in
10 the foremarket.

11 **Q.** And then your last item here on the slide is: Hard to
12 assess life cycle costs. What are life cycle costs?

13 **A.** It's the overall cost of using, in effect, a system from
14 the point in time I buy the product in the foremarket,
15 including all the things I'm going to buy in the aftermarket
16 over the lifetime in which I'm going to be using the
17 foremarket product.

18 **Q.** Why does it matter if it is hard for a smartphone buyer to
19 assess the life cycle costs?

20 **A.** Well, to the extent it is hard to assess the life cycle
21 costs of joining an operating system ecosystem, including
22 buying the phone, then it will be hard to take those costs
23 into account in making -- making the decision to join that
24 ecosystem or then to make a decision to switch over from iOS
25 to Android.

1 Q. So in light of all this, what is your opinion on whether
2 competition between Android and iOS constrains Apple's
3 conduct in the App Store, app distribution process?

4 A. I conclude that the operating system foremarket is a very,
5 very limited constraint in the aftermarket.

6 Q. So let's turn to the question of having eliminated
7 nonsmartphone OS app distribution and having eliminated
8 Android app distribution as substitutes.

9 Does that mean that the market you are defining here is
10 just the App Store itself?

11 A. No.

12 Q. Why not?

13 A. In order to understand what the relevant market is, it's
14 important to understand what it would be if it was possible
15 for developers to have direct distribution and, of course,
16 possible for other App Stores to enter the market, because
17 that then describes the competitive -- the potentially
18 competitive situation that would exist in the absence of the
19 conduct and it also tells us the extent to which the App Store
20 in -- in that environment would have -- would have market
21 power. We can't assume that it would. We have to understand
22 that environment to understand whether in that environment,
23 the App Store would face -- would face substitutes or not.

24 Q. What did you conclude the iOS app distribution
25 environment would likely look like, absent the restrictions

1 here?

2 **A.** I concluded that in the absence of the restrictions, there
3 would be multiple alternative App Stores, as we see in other
4 environments where there are no restrictions or no meaningful
5 restrictions on app distribution, and that developers would
6 use direct distribution to get apps into the hands of
7 consumers.

8 **Q.** Just so we have some terminology, what do you mean by
9 direct distribution?

10 **A.** Direct distribution means that the -- let me give you a
11 non- -- let me give you a non-OS example just to kind of bring
12 it down to what we are familiar with.

13 **Q.** Okay.

14 **A.** If I want to buy a pair of sneakers, I can go to Nike.com
15 and, Nike.com can distribute that pair of sneakers directly to
16 me. You have the same situation in app distribution.
17 Developers, when there aren't any restraints, commonly make
18 apps available on, for example, their websites and then
19 distribute those apps directly to consumers.

20 **Q.** And so what -- taking all this into account, what did you
21 define to be the aftermarket that is relevant to analyzing
22 Apple's conduct with respect to the app distribution
23 restrictions?

24 **A.** The iOS app distribution market includes all the channels
25 that consumers and developers would use, and that includes App

1 Stores operating as online marketplaces and direct
2 distribution.

3 **Q.** Is this a single-brand market?

4 **A.** It is.

5 **Q.** And tell me, do you believe it's appropriate to define a
6 single-brand market here?

7 **A.** Absolutely. Given the business realities here, I think
8 it's absolutely the right way to define a market here and
9 would be wrong to define it in any other way.

10 **Q.** And was the various qualitative issues and quantitative
11 matters that we just walked through sufficient to get you to
12 your opinion that this is the right market here?

13 **A.** Yes. To start with, when we talk about a single-brand
14 market here, it could only be a two-brand market because the
15 only possible choices are iOS and Android. And for the
16 reasons we talked about, Android is really not a relative --
17 it is not really an important substitute for the reasons we
18 talked about, because you can't go to the Google Play store,
19 so that is not a substitute, and the foremarket competition is
20 limited. So I would not include that second brand in that
21 market and, therefore, it is a single-brand market focused on
22 the distribution of iOS apps.

23 **Q.** Did you, in addition, do any data analyses in assessing
24 the aftermarket here?

25 **A.** I did.

1 Q. And what were the data analyses that you did? Could you
2 just list them?

3 A. I did an analysis of *Fortnite* data, and I also did an
4 analysis of certain consumer data that were collected by
5 Professor Rossi in a survey he conducted.

6 Q. And are the data that you looked at here the kind of data
7 that you would look at in the ordinary course of your work as
8 an economist?

9 A. If I had access to these kind of data, sure.

10 Q. Okay. Fair. So let me ask you first with respect to the
11 *Fortnite* data you are talking about. Just very, very high
12 level, what are you referring to in terms of what the dataset
13 was?

14 A. So *Fortnite* has available on its systems individual
15 account-level data. And I was able to get a random sample of
16 that very, very, very large set of account data.

17 Q. And you state in your written testimony that the account
18 data you looked at was anonymized. Is that accurate, or did
19 you have access to individual people's information?

20 A. It was anonymized.

21 Q. Could you tell from looking at the *Fortnite* user data the
22 extent to which users switched regularly from iOS play to
23 using on another device or whether they tended to stay on a
24 single device most of the time?

25 A. I did.

1 Q. And can you tell the Court what you found?

2 A. Yes, I did a number of analyses on that. But let me
3 talk -- let me talk generally about what I found. It is
4 easiest to describe it that way.

5 Q. Let me stop you before you do.

6 Are the numerical details actually in your written
7 testimony?

8 A. Yes. They're in my written testimony. There is
9 additional data in my rebuttal testimony. But, yes, there's
10 data there.

11 Q. With that background, please go ahead.

12 A. So let me start generally, not just focusing on iOS but
13 thinking about all the different platforms that -- that
14 consumers can play *Fortnite* on.

15 What we see in the data is that generally people just use
16 one platform. Not a hundred percent, but the predominant --
17 predominance of people use just smartphones, they use just
18 game consoles, they use just personal computers. That is what
19 the preponderance of people do in each of those categories.
20 Then there are some people who do use multiple ones, but the
21 preponderance of the players are really just using one of
22 those.

23 THE COURT: So "preponderance" in the legal
24 terminology, not the economic terminology, means 51 percent or
25 something beyond 51 percent. What do you mean by that?

1 **THE WITNESS:** I mean generally more like somewhere
2 between 65 to 90 percent. Very high number.

3 **THE COURT:** Okay. That's also a very big
4 discrepancy. That is like one-third of the -- that is a
5 30-point differential.

6 (Simultaneous colloquy.)

7 **THE COURT:** Maybe it doesn't matter if it's 60 versus
8 90, but it seems that that would be a pretty big berth.

9 **THE WITNESS:** You've actually reminded me of
10 something. I'm going to be getting to the 60 percent number
11 in a second.

12 **THE COURT:** Okay.

13 **THE WITNESS:** What I just said is in the range of 80
14 to 90 percent in the sense of if I include -- if I include
15 people who are only using -- only using a device over a long
16 period of time, that is the only one I see a game console or a
17 smartphone, if I also include people who the bulk of the
18 remaining time are also using just that one device, those
19 numbers are in about the 90 percent range.

20 **THE COURT:** I'm not sure I understood that. Go
21 ahead, Mr. Bornstein.

22 **BY MR. BORNSTEIN:**

23 **Q.** Maybe it would help, can you take a look, Dr. Evans, at
24 paragraph 126 of your written testimony?

25 **THE COURT:** Direct or rebuttal?

1 **MR. BORNSTEIN:** Direct, Your Honor.

2 **BY MR. BORNSTEIN:**

3 **Q.** And the question, once you've had the opportunity to
4 review it, is just whether this refreshes your recollection
5 about the data that you reviewed on the subject the Court was
6 asking you.

7 **A.** Yes, it -- yes, it does.

8 **Q.** And obviously the Court can read what is here. Would you
9 just briefly explain what you found now that you have the
10 benefit of reviewing this again?

11 **A.** Yes. Apologies. I'm pausing because I want to make sure
12 I don't cause any -- any -- any confusion. So the second
13 sentence of this says that over the period of time I examined
14 this, which was a long period of time, that 82.7 percent had
15 played *Fortnite* only on a single platform, and that is true
16 across game consoles, smartphones and PCs. So that is
17 overall.

18 The story is a little bit different, Your Honor, in the
19 case of if I just focus on consumers who had played with
20 iOS. And let me see if I can solve the source of the
21 confusion here.

22 So if I look at users who are -- who have ever used iOS
23 to play *Fortnite*, those users fall into two groups: There is
24 a group of users who, if I take minutes, they have only
25 played iOS for about 60 percent of those minutes. And

1 depending upon the time period and so forth, sometimes the
2 data will show 60 percent or 62 percent, but it is in that
3 range, depending upon the time period.

4 Then there is the remainder who have used iOS, but have
5 also used other devices. That remainder falls into two
6 categories. One category are people that primarily use game
7 consoles or personal computers. So they are mainly using
8 those devices. But sometimes they also have iPhones. And
9 sometimes those people will play *Fortnite* or use *Fortnite* on
10 their iPhones.

11 Then there's another category of users who are primarily
12 playing on their smartphones, not entirely, but who are
13 primarily playing on their -- on their -- on their
14 smartphones. Those are the three groups.

15 Does that --

16 **THE COURT:** So you said 60 percent are only using --
17 of iOS users.

18 **THE WITNESS:** Of iOS users --

19 **THE COURT:** 60 percent are only using the one device.

20 **THE WITNESS:** For the iOS *Fortnite* app, on -- for
21 the iOS *Fortnite* app, 60 percent of the minutes played
22 on iOS are accounted for by people who are only playing on
23 an iOS device. And then there is an additional chunk of
24 people who are --

25 **THE COURT:** People or minutes? That's why I think

1 I'm getting confused. I had first thought the 60 percent
2 referred to people, and then you said minutes. Maybe they are
3 the same; maybe not. I don't know.

4 **THE WITNESS:** Your Honor, they are not.

5 **THE COURT:** Okay.

6 **THE WITNESS:** So if I look at accounts, which is
7 people, the percent of people who are using just their iPhone,
8 that percentage is higher. But -- but the minutes result is
9 different because you have some people --

10 **THE COURT:** 60 percent of the minutes are iOS only,
11 which leaves 40 percent.

12 **THE WITNESS:** Yes.

13 **THE COURT:** Of that 40 percent, some of that is joint
14 play with consoles and some of that is joint play with PCs?

15 **THE WITNESS:** So all of the remaining 40 percent are
16 accounts where the minutes are -- people are sometimes using
17 their iPhone and sometimes using a game console or PC.

18 **THE COURT:** Okay.

19 **THE WITNESS:** But with an important qualification for
20 that 40 percent, which is that one chunk of that 40 percent,
21 and I don't have the number handy, but it is somewhere in the
22 range of maybe 10, 15 percent, is coming from people who are
23 almost -- who are usually playing on a game console or a PC
24 and just sometimes using their iPhone.

25 **THE COURT:** All right. Go ahead, Mr. Bornstein.

1 **MR. BORNSTEIN:** Thank you, Your Honor.

2 **BY MR. BORNSTEIN:**

3 **Q.** Did you do any work to assess what happened to *Fortnite*
4 play after it was removed -- after *Fortnite* was removed from
5 the App Store?

6 **A.** Yes, I have.

7 **Q.** And can you tell us, first of all, just what you were
8 trying to measure?

9 **A.** Yes. I was trying to determine the extent to which -- the
10 extent to which those -- those consumers who are -- who are
11 only -- only using their iPhones, the extent to which those
12 people decided to make a switch, substituted from an iPhone to
13 a game console or PC. I was interested in determining the
14 extent to which that dedicated group of iPhone users actually,
15 in fact, made a substitution decision to a game console or a
16 PC.

17 **Q.** Before we dive into how you did that, can you just tell us
18 the punch line, what did you find?

19 **A.** I found that a very small portion of the minutes that they
20 would have spent had they been able to continue using the new
21 season of *Fortnite*, a very small portion of those minutes
22 moved over to game consoles or PCs.

23 So it is not like there was no substitution; it's just
24 that there was not very much substitution.

25 **Q.** Let's now see if we can dive into the details and make the

1 economics accessible to those of us who don't have the
2 economics degrees.

3 First of all, how did you construct this analysis?

4 **A.** The starting point is an event, which is the removal of
5 the iOS *Fortnite* app from the App Store. So that's a
6 central focus of this analysis. And with that, I wanted to do
7 a before-and-after comparison of what were things before and
8 what were things after.

9 But I wanted to do that in a very -- in as rigorous and as
10 scientific a way as I could, given the -- given the data
11 that's available.

12 **Q.** So what methodology did you use to do that?

13 **A.** The technical term in economics is a diff-in-diff
14 analysis, but it is most easily seen by looking at something
15 that unfortunately we're maybe all too familiar with from the
16 press, which is looking at a treatment group and control
17 group, that is a set of terminology that we are seeing all the
18 time now because of drug testing of the vaccine.

19 **Q.** Just so we have it on the record, what did you call the
20 technical term in economics?

21 **A.** It's called differences in differences.

22 **Q.** Thank you. And so how did you go about applying that
23 methodology to analyze this situation?

24 **A.** So I have a slide that illustrates this. If I could go
25 back to the previous slide because that is the slide that

1 illustrates it.

2 I started with what I would call a treatment group. In
3 this case, the treatment group isn't a good drug. The
4 treatment group is something that is adverse, which is the
5 iOS-only players before the removal, who as a result of the
6 removal had the adverse event that they can no longer access
7 the new season of *Fortnite*.

8 So I started with that treatment group. To do a careful
9 analysis, I needed to do -- I needed to have a control group
10 because there are -- there are many things that are happening
11 both with *Fortnite* and just generally with people and the
12 economy over time. So I needed to have a control group to
13 make sure that I could determine what's the result of the
14 removal and what is the result of extraneous factors.

15 **Q.** How did you construct your control group?

16 **A.** So just as I had a group of iOS-only players, I had -- I
17 constructed a group of people who only played on PCs and
18 consoles, but in a -- in a particular methodical way to make
19 sure that I had a really, really good control group.

20 **Q.** What was that?

21 **A.** So I -- for each iOS-only player, I -- I went into the
22 data and found a console or PC player that prior to the event
23 behaved similarly in the sense that their app usage was
24 similar and in the sense that their change in -- in play over
25 time was similar?

1 So I tried -- I didn't get identical twins. I didn't get
2 identical twins, but I tried to get iOS-only and console and
3 PC players that were as similar to each other as possible.

4 **Q.** Again, did you have any personally identifying information
5 about these specific accounts available to you?

6 **A.** None whatsoever.

7 **Q.** So having put together your treatment group and your
8 control group and applying the treatment of the removal
9 of *Fortnite*, what did you find about whether or not people
10 engaged in substitution?

11 **A.** If I can get to the next slide, the results of the
12 analysis are shown there.

13 So if I can go through the first row.

14 **Q.** What is this first row?

15 **A.** The first row is the estimate of how many iOS minutes
16 were lost as a result of iOS-only players not being able to
17 play *Fortnite*. So they -- the estimate, based on the
18 comparison of the treatment and control group, is that there's
19 a reduction of 56.3 minutes. Just to put that another way, if
20 the event hadn't happened, these individuals would have spent
21 56.3 minutes using the iOS *Fortnite* app.

22 **Q.** Okay. What does the second row on this chart show, which
23 reads: Increase in non-iOS minutes, 9.4 minutes per week?

24 **A.** So before the event, the iOS-only users had zero non-iOS
25 minutes by definition. After the event, what we observe from

1 the data is that they actually go and substitute the game
2 consoles and PCs to an extent.

3 **THE COURT:** Could you also tell me the time period
4 that you were testing?

5 **THE WITNESS:** Yes. To do this analysis, I looked at
6 the 10 weeks prior to August 13th, 2020, so that's the pre
7 period. And then I looked at the 10 weeks after that.

8 **THE COURT:** Did you factor in when my decision came
9 out with respect to whether or not I was going to
10 allow *Fortnite* to remain?

11 **THE WITNESS:** Well, from the standpoint of these
12 users --

13 **THE COURT:** Well, they may have been waiting. That
14 is why I'm asking.

15 **THE WITNESS:** So there is nothing that -- in this
16 analysis that factors in your decision. It is what users can
17 actually do with their iOS app that's looked at in this
18 particular analysis. So as of August 27th --

19 **THE COURT:** So you did 10 weeks prior and 10 weeks
20 after?

21 **THE WITNESS:** Yes. I should have said this. I'm
22 sorry. These comparisons look at the change going out to the
23 10th week. So I'm looking at the longest period possible with
24 the data.

25 To put that another way, as of the 10th week after the --

1 after the -- after the removal, that 56.3 minutes is how much
2 they would have spent had that removal -- they would have
3 spent playing *Fortnite* had that removal not taken place.

4 **THE COURT:** Do I have some chart in the record that
5 shows the 9.4 or each of the weeks' analysis? Do I have -- is
6 that somewhere in the record? Or did you just -- do I have
7 that somewhere?

8 **THE WITNESS:** I don't believe that in the written
9 testimony we provided the week-by-week analysis. It's --

10 **THE COURT:** Did you provide it in your report?

11 **THE WITNESS:** It's in our work papers for sure that
12 have been provided.

13 **THE COURT:** Okay. Thank you.

14 **THE WITNESS:** I don't recall whether the -- my
15 opening report -- I am sorry, whether my rebuttal report
16 reported the week-by-week data.

17 **THE COURT:** Okay. Thank you. Proceed.

18 **MR. BORNSTEIN:** Thank you, Your Honor.

19 **BY MR. BORNSTEIN:**

20 **Q.** So we've covered the first two rows.

21 What does the third row that's titled Replacement Rate of
22 16.7 percent mean?

23 **A.** What that means is out of the 56.3 minutes that would have
24 been spent on iOS, from the standpoint of Epic, they were
25 able to recover 9.4 minutes of that time as a result of those

1 players switching over to game consoles and PCs.

2 The replacement rate calculates the percent of the iOS
3 time that did, in fact, get substituted over to game consoles
4 and PCs. And the calculation is 9.4 divided by 56.3, and that
5 says that 16.7 percent of the time that would have been spent
6 on the iOS *Fortnite* app ended up moving over to game consoles
7 and PCs.

8 **Q.** Okay. If we were to stop there for just a second and you
9 got to a replacement rate of 16.7 percent, what would that
10 mean to you as an economist in terms of the level of
11 substitution and defining a market?

12 **A.** Well, that shows a very low level of substitution because
13 the -- more than 80 percent of the time was completely lost
14 and didn't get substituted over at all.

15 **Q.** So now let's kick the tires a little bit on the
16 16.7 percent.

17 Did you form a view as to whether in the ordinary course
18 some of these non-iOS -- excuse me, some of these iOS-only
19 players would have wound up spending time on a non-iOS device
20 anyway?

21 **A.** Yes, I did.

22 **Q.** What is the basis of that conclusion, briefly speaking?

23 **A.** So the thing I wanted to check here, with regard to this
24 analysis is, over time, people get into gaming and they just
25 ordinarily make decisions to go out and get game consoles. So

1 I wanted to see the extent to which that phenomenon
2 happened -- happened here.

3 **Q.** And so is there some portion, then, of the 9.4 minutes
4 that is attributable to people who just would have got a
5 gaming console anyway?

6 **A.** Yes. And just to be clear on this, these iOS-only users
7 who have been only iOS users for a fair amount of time, some
8 of those iOS-only users over the course of the next 10 weeks
9 would have made the decision regardless of what happened
10 to iOS -- *Fortnite* being in the App Store, they would have
11 made the decision to go out and get a game console just
12 because that's what some people -- some people -- some people
13 do.

14 And it turns out that a large portion of that 9.4 minutes
15 is actually accounted for not by -- not by people substituting
16 to game consoles and PCs because they couldn't play *Fortnite*,
17 the iOS version of *Fortnite*, but just because they would have
18 anyway gotten a game console and shifted -- shifted some time.

19 **Q.** How did you assess whether people would have gotten a game
20 console or PC anyway?

21 **A.** I also used the *Fortnite* data to do that. And what I did
22 is, I went back from August 13th, I went back 42 weeks into
23 late 2019 and I identified iOS users who only
24 played *Fortnite* on iOS for the 32-week period. So for 32
25 weeks, they are only using the iOS app to play *Fortnite*.

1 Then I wanted to know, well, what would happen to them
2 over the next ten weeks. And so I looked. So then over the
3 next 10 weeks, I observed the extent to which they moved their
4 time to game consoles and PCs.

5 **Q.** To be clear, those people were moving before or
6 after *Fortnite* came off the App Store?

7 **A.** I took this 42 weeks back from the removal of *Fortnite*.
8 So the end of the 10 weeks is before the removal of *Fortnite*
9 from the App Store.

10 **Q.** If you assume that there would be a similar amount of game
11 console purchases after the removal of *Fortnite*, what does
12 that do to your numbers here?

13 **A.** It actually knocks down that replacement rate quite a bit
14 from 16.7 percent to 3.1 percent.

15 **Q.** Are the numerical details for that in your written
16 testimony?

17 **A.** They are.

18 **Q.** Let me kick the tires in one other way on this replacement
19 rate.

20 You talked in your written testimony about a SSNIP test,
21 right?

22 **A.** I do.

23 **Q.** And what is the typical price increase associated with a
24 SSNIP test? What typical range of price increases are
25 associated with a SSNIP test?

1 **A.** Economists usually use 5, 10 percent.

2 **Q.** What is -- at a very high level -- what a SSNIP test used
3 for?

4 **A.** So a SSNIP test, which stands for small but significant
5 non-transitory increase in price, that -- that -- that
6 increase in price is used to assess the extent to which
7 consumers would -- would switch to other -- switch to other
8 products and whether they would do so to an extent that it
9 would make it unprofitable for a firm to raise price. Because
10 if enough consumers switched over, then that would make it
11 difficult for a firm to profitably raise price.

12 **Q.** Let's focus, then, on the event that you looked at in your
13 data analysis here, the removal of *Fortnite*.

14 Is that a SSNIP?

15 **A.** So not to make things overly complicated, we often talk
16 about price in antitrust cases, but the quality is also
17 important. And just as increasing price is bad for consumers,
18 reducing quality is bad for consumers. And actually sometimes
19 in doing these kinds of tests, economists talk about a small
20 but significant non-transitory decrease in quality.

21 So perhaps with too much background there. In this
22 particular case, the removal of *Fortnite* from the App Store,
23 which prevented people from playing the new season, are
24 characterized as a very, very large -- not very, very large --
25 is a substantial decrease in quality of the *Fortnite* app,

1 iOS *Fortnite* app from the standpoint of *Fortnite* players.

2 **Q.** And how does the decrease in quality here of the removal
3 of *Fortnite* from the App Store compare to a typical 5 to
4 10 percent price increase in a SSNIP in terms of how impactful
5 it is on consumers?

6 **A.** Well, you're just stating this may be in the -- in a
7 simple way. A SSNIP test is a small change in -- in -- in
8 price or quality for the consumers. What we have here is a
9 big change. It's a big change.

10 **Q.** And what does that mean to you for the representativeness
11 of this replacement rate that you've come up with?

12 **A.** It means that what we are observing here with either the
13 16.7 percent or the 3.1 percent is substitution
14 that iOS-only players are making in response to a really big
15 adverse event from -- from their standpoint in terms of the
16 quality of the app that they can use.

17 **Q.** What would you expect the substitution to look like if
18 instead of having *Fortnite* removed from the App Store it was
19 just a 5 to 10 percent increase? Would it be more or less
20 substitution?

21 **A.** It would be far less substitution.

22 **Q.** We have been talking a lot about how consumers reacted to
23 the removal of *Fortnite*.

24 Did you do any analysis of the *Fortnite* data that bears on
25 the question of developer substitution?

1 **A.** I did.

2 **Q.** And just can you --

3 **THE COURT:** Before we leave games, did you do any
4 analysis about whether users just switched to a comparable
5 game? I mean, you have not -- you take an opposite view that
6 I shouldn't focus on gaming. So you are just talking about
7 apps generally.

8 So did you do any analysis to see whether people decided,
9 you know, we'll use PUBG or something similar to *Battle*
10 *Royale*? Did you do any analysis in that regard?

11 **THE WITNESS:** No. With the *Fortnite* data, I didn't
12 have available to me information on anything these
13 accountholders did outside of Epic. It is possible that the
14 iOS-only users switched to other iOS-only games, and I would
15 expect that that is probably something that some of them did.

16 **THE COURT:** How does that impact the analysis? Let's
17 assume for purposes of argument that all these users just
18 decided, you know what, we are just going to play a different
19 kind of game that we like. Then how does that affect it?

20 **THE WITNESS:** I think it affects it depending upon
21 whether we are talking about iOS games or are we talking
22 about games on consoles and PCs. If I can take those in
23 pieces.

24 If separate and apart from this analysis we learned
25 that iOS-only users who couldn't play the *Fortnite* app decided

1 to play Roblox or a casual game on iOS, then that's
2 consistent with our market definition -- my market definition
3 here because they are basically substituting to
4 another iOS -- iOS game.

5 **THE COURT:** But it could have been another third
6 party. I mean --

7 **THE WITNESS:** Yes.

8 **THE COURT:** I mean, so some other gaming company
9 could have benefited, right?

10 **THE WITNESS:** That -- that is -- that is possible.
11 That is possible. So but here -- yeah, I'm not addressing
12 that particular issue here. But that is correct that the
13 iOS-only users, I would expect that one of the things they
14 would, in fact, have done is to have thought about
15 substituting to other iOS games, because these are iOS --
16 these are iOS-dedicated users and, therefore, I would expect
17 that they could very well have considered using
18 another iOS-only game on their smartphone.

19 That wouldn't affect any of my -- that part of it would
20 not affect any of my conclusions.

21 **THE COURT:** Okay. You said there is a second part.

22 **THE WITNESS:** So the second part is if those iOS-only
23 users switched to a -- switched to another game on a console,
24 then that's a different kind of substitution, but that seems
25 implausible here because if they are iOS-only and they are

1 using -- they are using *Fortnite*, it's not obvious that they
2 would switch to a game console version of it. It is a
3 possibility, I can't exclude it, but it seems -- it seems
4 unlikely.

5 **THE COURT:** All right. Proceed, Mr. Bornstein.

6 **MR. BORNSTEIN:** Thank you, Your Honor.

7 **BY MR. BORNSTEIN:**

8 **Q.** Just one follow-up on the Court's question.

9 I believe I heard you say that if people who
10 were iOS-only *Fortnite* place players switched to other iOS
11 games that that would be supportive of your market definition
12 analysis; is that correct?

13 **A.** That's correct.

14 **Q.** Would you just explain briefly why it would be supportive
15 of your analysis?

16 **A.** Yes. Because it demonstrates that what they are
17 substituting to is another iOS game that they can get in
18 the iOS app distribution market and not looking for an
19 alternative from a non-iOS app distributor.

20 **Q.** So they stay in the iOS ecosystem and don't go find games
21 somewhere else is your point; is that right?

22 **A.** That's correct.

23 **Q.** Okay. Let's turn to the analysis that you did using
24 the *Fortnite* data from the developer perspective.

25 Can you explain what the test is that you constructed?

1 **A.** Yes. So from -- from Epic's standpoint, while Epic cares
2 about how much time people play, at the end of the day, what
3 they care about as a business is how much *Fortnite* -- *Fortnite*
4 users spend.

5 So the other analysis I did is to examine the extent to
6 which spending shifted from just being spent on iOS devices
7 to being spent on game consoles or PCs.

8 **Q.** Was that methodology similar to the methodology you just
9 described?

10 **A.** Yeah, aside -- it's identical with the exception that I'm
11 focused on iOS-only revenue people as opposed to iOS-only
12 minutes.

13 **Q.** And in what did you look to measure in this part of the
14 analysis?

15 **A.** I looked to measure the extent to which spending for the
16 iOS-only users moved over to game consoles or PCs.

17 **Q.** And what did you use that measurement, then, to assess in
18 terms of developer substitution?

19 **A.** So for this part of the analysis, I'm looking at the
20 question of -- from the standpoint of Epic as a developer, if
21 Apple came to it and exercised market power by increasing
22 commissions, for example, would Epic be able to resist that
23 exercise of market power by simply deciding on its own
24 outside, of course, of the litigation context, exiting on its
25 own from the App Store.

1 Q. And what did you find?

2 A. I found that, in theory, that would be possible if enough
3 of that revenue moved over to game consoles and PCs, but that,
4 in fact, not nearly enough revenue did, in fact, move over to
5 game consoles and PCs to enable Epic to profitably make a
6 decision to say to Apple, no, we're going to just jump.

7 Q. Are the numerical details of that analysis in your written
8 testimony?

9 A. Yes. They are.

10 Q. We have been talking a lot about *Fortnite* for perhaps
11 obvious reasons, but does looking at *Fortnite* as the basis for
12 doing all this analysis have any particular bias on the
13 results of your work?

14 A. Yes, it does.

15 Q. In what way?

16 A. It's a very conservative bias. The reason being that,
17 compared to other iOS app developers, *Fortnite* has a number
18 of advantages in terms of resisting -- resisting market power
19 from Apple. Had has a well-developed game console business, a
20 well-developed PC business, has a lot of users on both of
21 those platforms. And, therefore, unlike most apps, has the
22 possibility that -- that iOS-only users could find another
23 home within Epic by moving to a -- *Fortnite* on a game console
24 or *Fortnite* on a PC.

25 Q. If you were to do a comparable analysis with one of the 46

1 games we saw on that chart that doesn't actually appear on
2 gaming consoles, how would the results there compare to the
3 results you found here?

4 **A.** Those developers would have a -- relative to Epic, a much,
5 much more difficult time resisting an exercise of market power
6 because they -- their customers don't have another app on
7 another device to turn to.

8 **Q.** And let's go outside the game context.

9 If you did the same analysis with an app like Uber that
10 relies so heavily on the attributes of smartphones, what would
11 you expect to find in terms of substitution?

12 **A.** Even less likely than the example I gave you.

13 **Q.** What seems like quite a long time ago now, you mentioned
14 that you had also looked at a survey that had been done by
15 Professor Rossi. We will hear from Professor Rossi about the
16 survey in due course. But can you explain to me what you did
17 with the results of his survey?

18 **A.** Yes.

19 Professor Rossi conducted a survey that examined really
20 the consumer side of this across-all-apps. And basically what
21 he did is -- let me describe it this way.

22 Consider a very large increase in the commission rate to
23 developers that results in their passing through some portion
24 of that cost. He examined the situation in which under
25 particular assumptions that -- that we made would result in a

1 5 percent increase in the cost of apps to consumers and
2 examine what substitution decisions iOS app users made with
3 respect to iOS apps.

4 **Q.** And with the benefit of the data that he collected, what
5 did you conclude?

6 **A.** I concluded that there was very little -- very, very few
7 consumers -- going back to our earlier conversation on
8 switching -- responded to that price increase by moving over
9 to Android -- Android devices or said that they would. This
10 is a survey asking a hypothetical. A very small portion said
11 that they would, in response to that price increase, switch
12 over to an Android device.

13 **Q.** Did you also perform a SSNIP test using the data from
14 Professor Rossi?

15 **A.** I did.

16 **Q.** And are the details of that in your written testimony?

17 **A.** They are.

18 **Q.** So we will spare ourselves a little bit of numbers.

19 Generally speaking, what is it that you found?

20 **A.** I found thinking about this in the hypothetical monopolist
21 framework that that price increase, the increase in the
22 commission rate that I talked about, would be profitable to
23 Apple because this test is obviously conducted with respect to
24 the App Store, which is the only distributor consumers can
25 use, that that price increase would be profitable to Apple

1 because there would not be enough substitution by consumers to
2 either Android devices or through the reduction of spending in
3 response to that price increase.

4 **Q.** All right. So did you come up with a slide that
5 summarizes your overall conclusions regarding the aftermarket
6 here?

7 **A.** I did.

8 **Q.** Can we talk a look at slide 26? Can you just spend one
9 moment and make sure we put a pin in this in the end and
10 describe what you found the aftermarket to be?

11 **A.** The aftermarket includes App Stores, which would include
12 the app. It includes third-party app stores, which would
13 include the App Store, and it includes direct distribution.
14 That is what it includes. What it does not include is
15 channels of distribution for non-iOS apps such as for other
16 operating systems, including Android, PCs, Windows and Macs,
17 and gaming consoles.

18 **Q.** Is the geographic market here covered in your written
19 testimony?

20 **A.** It is.

21 **Q.** Let's turn to monopoly power or market power.

22 **THE WITNESS:** Would it be possible, Your Honor, for
23 me to just have another sip of water before we move on?

24 **THE COURT:** Of course.

25 **MR. BORNSTEIN:** I'm going to take the opportunity to

1 do the same.

2 **BY MR. BORNSTEIN:**

3 **Q.** Okay. Back behind the shields.

4 Let's talk about market power. Did you form a view about
5 whether Apple has market power in this iOS app distribution
6 market?

7 **A.** Yes, I do.

8 **Q.** What was your opinion? What is your opinion?

9 **A.** My opinion is Apple has monopoly power in the iOS app
10 distribution market.

11 **Q.** Is there a difference between monopoly power and market
12 power?

13 **A.** There's a difference between monopoly power and
14 substantial market power, where monopoly power is much greater
15 than -- than substantial market power.

16 **Q.** Do we have a slide that shows the basis for your
17 conclusion that Apple has monopoly power in the iOS app
18 distribution market?

19 **A.** Yes, this is the slide I prepared.

20 **Q.** This -- this information appears in your written
21 testimony; is that right?

22 **A.** It does.

23 **Q.** Rather than go through all of them, I would like to focus
24 on just one of the items here, which is number three, high and
25 persistent profit margin.

1 Can you just step back a bit and explain to the Court why
2 it is that profit margin is something that you featured in
3 your analysis here?

4 **A.** I featured it in my analysis here because it is relevant
5 not just for the topic we are talking about now, monopoly
6 power, but it is relevant for other issues. In particular, in
7 this particular case, there's the issue of the representation
8 by Mr. Jobs early on that the App Store was going to operate
9 on a break-even basis.

10 **Q.** What -- specifically, what representation are you talking
11 about or representations are you talking about?

12 **A.** So in 2008 when the App Store was announced, Mr. Jobs got
13 a question from reporters about: Isn't this a problem because
14 it is a monopoly?

15 And his response to that question: It would be great if
16 we had a -- let me do the quick summary and then we can turn
17 to the quote, if you like.

18 His response to that question was essentially, we're
19 planning to operate the App Store in a way where we are not
20 really going to make money from it.

21 **Q.** Why does that -- is this slide here the representation
22 you're talking about from PX880?

23 **A.** Yes. In the answer to the question, Mr. Jobs says, we
24 don't intend to make money off the App Store. Then he says,
25 we're basically giving all the money to developers here, and

1 if that 30 percent of it pays for running the store, well,
2 that would be great.

3 **Q.** So is it your understanding that Mr. Jobs was running a
4 charitable enterprise here at the App Store?

5 **A.** No, not at all.

6 **Q.** As an economist, what do you understand would be the basis
7 for someone in his position to tell developers that they would
8 be running the store for free?

9 **A.** This is the standard user pay model. So as a really good
10 businessperson, Mr. Jobs recognizes, just like other operating
11 system suppliers have -- let me state that a little bit
12 differently.

13 So what Mr. Jobs is announcing here is consistent with the
14 user pay model where the idea is to make it as easy as
15 possible for developers to create apps, not charge them, and
16 then make money from the user side.

17 So the whole idea is I can get a lot of developers to
18 write apps, and that is going to make the platform more
19 interesting to users. And in this particular case, it
20 means -- and Mr. Jobs himself said this elsewhere, means that
21 they can sell devices, iPhones.

22 **Q.** What are you referring to when you say Mr. Jobs has said
23 this elsewhere?

24 **A.** I believe I've seen statements from Mr. Jobs where he
25 talks specifically about the interest of Apple and the

1 developers being aligned in the context of this particular
2 issue.

3 **THE COURT:** Mr. Bornstein, this question and response
4 are not actually adjacent to each other in the underlying
5 document, and that underlying document is not yet in evidence.
6 Can you pull up the actual document?

7 **MR. BORNSTEIN:** Yes, Your Honor. I believe Mr. Rudd
8 can do that. I was under the impression this was entered,
9 Your Honor, through some of the deposition designations that
10 came in.

11 **THE COURT:** Okay. Perhaps it is. I don't have it up
12 here.

13 **MR. BORNSTEIN:** This was discussed in Mr. Forstall's
14 testimony, one of the Apple witnesses who worked with
15 Mr. Jobs.

16 **THE COURT:** You're right.

17 Mr. Rudd, can you move to the appropriate page where this
18 came from?

19 **THE COURT:** Thank you.

20 **MR. BORNSTEIN:** Don't block it.

21 **THE COURT:** I wanted to see what is in between them.

22 **MR. BORNSTEIN:** Don't block it.

23 **THE COURT:** Okay. Thank you.

24 **MR. BORNSTEIN:** Would Your Honor like a hard copy?

25 **THE COURT:** No, I'm sure I have it in one of these

1 hundred binders here.

2 **MR. BORNSTEIN:** I'm confident you may have more than
3 one, Your Honor.

4 **BY MR. BORNSTEIN:**

5 **Q.** Okay. I'm going to move on to what actually happened in
6 the real world.

7 Did Apple actually run the App Store on a break-even basis
8 as Mr. Jobs had said?

9 **A.** They did not.

10 **Q.** Where is it that you got data about the App Store profit
11 margins?

12 **A.** I got data on the App Store profit margins from discovery
13 in this case.

14 **Q.** And, specifically, did you do calculations based on
15 documents that you received from Apple?

16 **A.** I've done calculations related to this topic. I have not
17 done any calculations that manipulated or modified the profit
18 and loss figures that Apple itself report.

19 **Q.** So to be clear, do you use profit margin data that comes
20 directly from Apple documents without any change whatsoever?

21 **A.** That's correct.

22 **Q.** Okay.

23 **MR. BORNSTEIN:** I would like to put up on the -- not
24 put up on the screen, Your Honor, but refer the Court to some
25 information that is subject to a sealing order here.

1 And, Dr. Evans, I would ask you, please don't say any
2 numbers out loud. We will try and get --

3 **THE WITNESS:** I can do that.

4 **BY MR. BORNSTEIN:**

5 **Q.** We will try and get through this testimony honoring the
6 sealing order.

7 First of all, take a look, you have a copy in front of
8 you, I believe, a hard copy of slide 29 of the demonstratives.
9 It should be in your binder.

10 **A.** Could you point me to a --

11 **Q.** It is -- PDX41 is the tab that has the slides behind them.
12 I will draw your attention to slide 21.

13 **A.** I'm sorry, I'm not with you yet.

14 **MR. BORNSTEIN:** May I approach, Your Honor, to give
15 Dr. Evans a hand?

16 **THE COURT:** You may. I'll say again for the record
17 what I've said in my orders, which is that all sealing orders
18 are subject to change if I decide ultimately in writing my
19 order that I need to release information to make the reasoning
20 transparent.

21 Proceed.

22 **MR. BORNSTEIN:** Thank you, Your Honor.

23 **BY MR. BORNSTEIN:**

24 **Q.** So, again, without revealing any numbers at all, can you
25 tell us what it is we see here on slide 29?

1 **A.** Yes. Let me start on the right-hand side. I received
2 profit and loss statements prepared by Apple for the years
3 2013 to 2020 with 2020, I believe, being forecasted numbers.

4 They came in two groupings: One was a grouping that I
5 received prior to the submission of my opening report in this
6 matter, and those were P&Ls that were presented to senior
7 executives at Apple and prepared by finance people at Apple
8 for presentations to those senior executives.

9 **Q.** That is the blue group we see here?

10 **A.** That's correct.

11 **Q.** What does the orange group reflect?

12 **A.** On the date on which my opening report was due, there was
13 also a production of other P&Ls that came from Mr. Cook's
14 files, and those provide additional profit and loss statements
15 for several -- for several years.

16 **Q.** And just to circle back now that we have the information
17 in front of us, are the numbers that appear here that we
18 cannot say out loud numbers that you took directly from
19 Apple's own documents?

20 **A.** Absolutely.

21 **Q.** And they reflect profit margins?

22 **A.** They do.

23 **Q.** Do they reflect profit margins of other parts of Apple's
24 business like the sale of iPhones or Apple Music?

25 **A.** The profit margins that are displayed on this exhibit are

1 specific to the App Store. They do not include or reference
2 other parts of Apple's business.

3 **Q.** So did these profit margins give you any relevant
4 information as an economist to help assess whether Apple has
5 market power in iOS app distribution?

6 **A.** They do.

7 **Q.** Please explain how it was relevant to your thinking here.

8 **A.** They provide evidence of market power because in the -- in
9 a competitive environment, I would have expected that over
10 time the margins would have declined in the face of
11 competition, either as a result of prices falling or as a
12 result of substantial investments being made in the App Store
13 that would improve its quality from the standpoint of
14 developers and consumers.

15 **Q.** Do we see a decline in profit margin on this slide?

16 **A.** No.

17 **Q.** Did you do any other work to assess how these profit
18 margins bear on the question of market power?

19 **A.** Yes, I did.

20 **Q.** What was that?

21 **A.** So to begin with, as an economist just looking at these
22 profit margins before I had done anything else, they are
23 obviously high relative to other businesses and industries
24 that I've worked on. But I didn't want to stop there. I
25 wanted to come up with a comparison group to assess -- to

1 assess the extent to which they were high and to just make
2 sure that I wasn't missing something in terms of the operation
3 of this kind of a -- this kind of a business.

4 **Q.** How did you go about constructing a comparison group?

5 **A.** I asked another expert in this case to collect financial
6 information on --

7 **Q.** Who is the other expert?

8 **A.** Mr. Ned Barnes.

9 **Q.** What did you ask him to collect?

10 **A.** I asked him to focus on online marketplaces, because the
11 App Store's an online marketplace, so I wanted to focus on
12 that as a comparison group and on my marketplaces that did
13 their accounting in a way similar to the App Store. And let
14 me just clarify what that means.

15 There is an issue on how revenue is booked when you are a
16 commission-based business versus a markup-type business. So I
17 wanted to make sure that we're making a comparison that --
18 that was on a comparable basis.

19 **Q.** Okay. And let me ask you, Dr. Evans, and the Court to
20 turn to slide 30, which we are also going to keep off the
21 screen because part of the information there is subject to a
22 sealing order.

23 Does slide 30 reflect the comparable online marketplaces
24 that Dr. Barnes -- excuse me, that Mr. Barnes identified with
25 the benefit of your instructions?

1 **A.** Yes. And just to be clear, when I say comparable online
2 marketplaces, these are online marketplaces with similar
3 accounting metrics that provide a benchmark group for
4 comparison to the App Store. I'm not suggesting that any of
5 these -- that any of these entities are exactly like the App
6 Store. They are online marketplaces. They are not
7 pharmaceutical companies. They are not software companies.
8 They are online marketplaces. They are obviously not
9 identical to the App Store.

10 **Q.** Do you believe that there's a sufficient similarity for
11 these to provide a relevant benchmark for your thinking?

12 **A.** Yes, I do.

13 **Q.** Why is that? Or is there anything beyond what you've
14 already said about why that is?

15 **A.** They're online marketplaces basically also selling digital
16 transactions. There are a number of other attributes of them
17 that make them comparable. Unlike a pharmaceutical company,
18 they are not R&D -- heavily R&D intensive. They are not the
19 kind of businesses that are taking on enormous risk in
20 developing -- developing new products like a motion picture
21 company would do, or some software company might do. They are
22 comparable in that sense.

23 **Q.** What are the comparables that Mr. Barnes identified?
24 Which companies?

25 **A.** There are five: Alibaba; eBay; Mercado Librea, which is a

1 large online marketplace in Latin America; Rakuten, which is a
2 Japanese company but with branches outside of Japan; and then
3 Etsy, which is arts and crafts kind of stuff.

4 **Q.** And based on the profit margins for these companies and
5 the App Store reflected on slide 30, what conclusion did you
6 draw with respect to Apple's market power?

7 **A.** That Apple's profit margin was vastly higher than this
8 benchmark group of companies, including even the most
9 successful one of these companies. It's -- it's a multiple of
10 the middle group that's shown on this slide.

11 **Q.** You're being very careful in not saying numbers, which I
12 think the Apple team appreciates.

13 **A.** I'm trying to.

14 **Q.** The -- you referred to accounting a few times.

15 Do accounting profits necessarily correspond to economic
16 profits?

17 **A.** Not necessarily. There are situations where -- so let me
18 step back just a little -- just a little bit.

19 So accounting profits and economic profits are not the
20 same thing. But accounting profits can be a really good or
21 not so good proxy for economic profits.

22 **Q.** Okay. And how do you tell whether they are a good proxy
23 or a not-so-good proxy?

24 **A.** There are certain situations where economists have
25 identified where accounting profits really give a bad

1 indication of economic profits. I touched on a couple of
2 those. So for industries that are R&D intensive or very
3 advertising intensive, where there is a lot of investment
4 taking place upfront in the business and then that is being
5 depreciated over time, there are situations where, because of
6 the depreciation schedules and what happens in fact relative
7 to how things are actually booked for accounting purposes,
8 that can lead to -- that can lead to biases. So that's a
9 potential issue.

10 Then the other issue that is often related to that is the
11 extent to which companies are making very risky investments.
12 So you see a successful company that has a high rate of
13 return; what you don't see are all the other ones that placed
14 a bet, like drug manufacturers commonly, and turned out not to
15 be successful.

16 **Q.** Okay. And are any of the red flags recognized in the
17 literature about accounting profits not being a good
18 reflection of economic profits present here?

19 **A.** No.

20 **Q.** Let's turn to a new topic, anticompetitive effects.

21 What conclusion did you reach about whether or not Apple's
22 conduct in these markets that we've discussed has had
23 anticompetitive effects?

24 **A.** So with regard to the iOS app distribution aftermarket,
25 I've concluded that Apple's restrictions harm competition and

1 through that, harmed the two major customer groups served
2 by iOS app distribution; namely, the developers, the app
3 developers and the app users.

4 **Q.** Do we have a slide that shows specifically what types of
5 harms you have identified?

6 **A.** Yes, I prepared this slide.

7 **Q.** What are -- just to again to start the conversation here,
8 what are the harms that you identified in the market?

9 **A.** At a high level, higher prices than would have existed in
10 the absence of those restrictions, less and poorer
11 distribution services provided to developers and ultimately
12 users, and slower pace of innovation than I would have
13 expected to have occurred in a market where there was more
14 competition.

15 **Q.** And you talked about higher rates and poorer distribution
16 service and less competition. What -- those are comparative
17 words. What did you use as the benchmark for comparison here?

18 **A.** So to say anything about whether Apple's practices caused
19 anticompetitive harm, I needed to compare the actual world
20 with those practices to what I would call a but-for world
21 where those practices didn't exist. And it's the -- it's the
22 difference between the but-for world and the actual world that
23 provides evidence that the -- that the practices caused harm.

24 **Q.** So with reference to slide 32, can you explain what
25 but-for world you assumed for this analysis?

1 **A.** Yes.

2 For the purposes of this analysis, I am, of course,
3 assuming that there is an Apple App Store, I am assuming that
4 the App Store continues to be bundled with the iPhone. I have
5 every reason to assume that in the but-for world, the App
6 Store has its guidelines and app-review process and so forth.

7 And for the purposes of this analysis, we'll talk about it
8 later, I believe, for the purposes of this analysis, I assumed
9 that the App Store can have the IAP requirement. It may
10 choose not to, given competition, but it can have the IAP
11 requirement in the but-for world that I'm talking about here.

12 **Q.** So what's different?

13 **A.** There is only one thing that is different. The only thing
14 that is different is that the App Store faces competition.

15 **Q.** And how did you form the view that if you took away the
16 restrictions that are at issue in this case that there would,
17 in fact, be competition for iOS app distribution against the
18 App Store?

19 **A.** Well, at a very basic level, that just follows from sound
20 economics. We know from economics, both theory but also
21 practical experience, in situations where there are barriers
22 to competition and they're removed that what typically happens
23 and what you would expect to happen is that once competition
24 is possible and those barriers are removed, that prices tend
25 to fall, quality tends to improve, things just get better in

1 the absence of artificial barriers for consumers. So that is
2 a starting point.

3 **THE COURT:** Did you do an analysis in the but-for
4 world with the change being an anti- -- to eliminate the
5 anti-steering provision?

6 **THE WITNESS:** In this part of the analysis, I did not
7 because I'm assuming in this part of the analysis that Apple
8 can have the IAP --

9 **THE COURT:** I understand what this one is. I am
10 asking a separate question, whether you did an analysis where
11 Apple maintained its App Store but eliminated the
12 anti-steering provision in their contract.

13 **THE WITNESS:** I did not do a narrowly focused
14 analysis of that topic.

15 **THE COURT:** All right. Proceed.

16 **MR. BORNSTEIN:** Thank you.

17 **BY MR. BORNSTEIN:**

18 **Q.** Did you see evidence of efforts to enter the iOS app
19 distribution market that were blocked?

20 **A.** Yes.

21 **Q.** What were those?

22 **A.** So in the last three years, several large companies have
23 tried to start what are essentially gaming app stores
24 on iOS.

25 **Q.** I don't mean to make it a memory test, but which companies

1 are you thinking of, to the extent you can recall?

2 **A.** I can definitely recall. So Facebook, Google, Amazon,
3 Nvidia, and Microsoft.

4 **THE COURT:** You said gaming app stores specifically.
5 Has anybody else ever attempted any other kind of store other
6 than gaming?

7 **THE WITNESS:** I do not know for -- I do not know the
8 answer to that.

9 **THE COURT:** All right. Proceed.

10 **BY MR. BORNSTEIN:**

11 **Q.** You talked about the basic principles of what would happen
12 in the event barriers are pulled down.

13 Have you seen evidence of the kind of price competition
14 you described in app distribution outside of the iOS
15 environment?

16 **A.** Yes.

17 **Q.** What are you thinking of?

18 **A.** Let me give you a couple of examples.

19 Outside of -- outside of iOS app distribution, there is
20 an interesting situation in PCs where the leading firm is
21 Steam. And back in 2018, Epic entered with the Epic Games
22 store. That is a situation where there is entry taking place
23 into the market. And what we know from that, I can't say
24 anything publicly about the details, as I understand it, but
25 the result of the entry of the Epic Games store is that there

1 was a substantial decrease in commissions following that.

2 **Q.** Are there any other examples that you identified through
3 your research where there was a reduction in app distribution
4 commissions as a result of competition?

5 **A.** Yes. Sticking specifically to the case where there is
6 entry and that has an effect on the market.

7 The other good example, interesting example is in South
8 Korea. So in South Korea, the equivalent of Google and the
9 mobile carriers in South Korea --

10 **MR. SWANSON:** Your Honor, I would like to object to
11 this because this is a part of the testimony that has not
12 previously been placed in evidence, and it relates to
13 newspaper articles in South Korea as to which we have an
14 objection under 702 as improper reliance materials.

15 **THE COURT:** Sustained at this point. You can come
16 back later if either you get it resolved or I allow it later.
17 But that is not something that's in front of me yet, so
18 provisionally sustained.

19 **MR. BORNSTEIN:** Thank you, Your Honor. Just so our
20 record is clear, we believe the materials are properly
21 considered under Rule 703, but we'll obviously deal with it
22 with Apple and not take up time with the Court now.

23 **BY MR. BORNSTEIN:**

24 **Q.** Let's pass over the South Korean example in light of the
25 objection.

1 Did you look at what commissions are actually charged on
2 operating systems where there is competition in distribution
3 of apps?

4 **A.** Yes, I have.

5 **Q.** And did you provide the details on that in your written
6 testimony?

7 **A.** Yes, I have.

8 **Q.** I will pass over it for now.

9 Have you seen any Apple evidence or Apple documents
10 contemplating the possibility that Apple might need to reduce
11 App Store commissions?

12 **A.** Yes, I have.

13 **Q.** Let's take a look at slide 33. Is this the evidence that
14 you are referring to?

15 **A.** Yes. This is an email from Mr. Schiller dating back to, I
16 believe, 2011.

17 **Q.** Okay. How does this constitute evidence, in your view,
18 that is supportive of the idea that competition could lead to
19 a reduction in commission rates?

20 **A.** Well, Mr. Schiller's email is relevant in two ways. He
21 specifically contemplates that given the possibility of having
22 to worry about competition, that there could be a need to
23 lower the commission rate down to 25 percent or 20 percent.

24 **Q.** And you said there were two ways. What is the second way
25 that this is relevant?

1 **A.** The other way it's relevant is he conjectures the
2 possibility of capping the profits. Basically -- I'm not
3 stating this specifically from the email, but I'm just
4 inferring what -- what it implies, essentially capping the
5 profits at \$1 billion and then running the store that way.

6 **Q.** And did you do a calculation to figure out what Apple's
7 commission rate would be if the billion-dollar cap
8 hypothesized here were actually put into effect?

9 **A.** Yes, I did.

10 **Q.** What would that commission have been in 2019?

11 **A.** In 2019, the commission rate -- if the only thing that
12 Apple did was to lower the commission rate, that commission
13 rate would be 6.8 percent. A 6.8 percent commission rate
14 would result in a situation where the App Store had a billion
15 dollars of profit.

16 **Q.** And what operating margin would that have corresponded to?

17 **A.** That would correspond to 30.1 percent.

18 **Q.** Have you done other analyses that are in your written
19 testimony about what would happen to Apple's commission rates
20 and profits in the event of entry into iOS app distribution?

21 **A.** Yes, I did.

22 **Q.** Did you also look at innovation in app distribution?

23 **A.** I have.

24 **Q.** And, specifically, what did you consider about innovation?

25 **A.** So the first thing I considered was the extent to which

1 the App Store is, in fact, investing in research and
2 development. Research and development is what companies often
3 do when they're trying to create new features and trying to
4 improve things and generate innovation. It is not necessarily
5 the only way that happens, but research and development
6 spending is an important one.

7 **Q.** Okay. I'm going to ask you to look, unfortunately, in
8 that book again, because we have a slide that is subject to
9 a -- contains information that is subject to a sealing order.
10 And I'll direct you, please, to slide 34 --

11 **A.** I have someone else's book here.

12 **Q.** I think you put the book on the ground.

13 **A.** Let me see if I can do this myself this time. The exhibit
14 is?

15 **Q.** It's Exhibit PDX41 of the slides. And I'm on slide 34. I
16 will caution you not to say any numbers out loud in this part
17 of the discussion.

18 **A.** Okay. I have it.

19 **Q.** Great. Can you tell us, first of all, what is reflected
20 here in this blue circle with a little red wedge?

21 **A.** Yes. It is intended to show the profits for the App Store
22 based on the financials for 2019 in the left column that we
23 talked about before. The costs that are reflected in those
24 financials and an estimate of the portion of the pie that goes
25 to R&D. I just want to make sure that I'm clear about one

1 thing.

2 The blue number corresponding to the profits and the
3 bracketed cost amount, those are based on the -- on the actual
4 Apple financial documents that I -- that I talked about
5 before.

6 The other number, referring to R&D, is identified in the
7 chart to the right, and I would need to explain what that is
8 because that is -- that is an estimate for the App Store as
9 opposed to a number that is just taken off of the P&Ls that we
10 talked about before.

11 **Q.** So the blue number and the bracketed number come directly
12 from an Apple document?

13 **A.** That's correct.

14 **Q.** Where does this red number come from?

15 **A.** The red number comes from what -- I probably won't use the
16 right terminology from an Apple standpoint, but the red number
17 comes from the organization that the App Store is part of. So
18 the App Store is part of a higher-level organization, which is
19 iTunes.

20 I have in a separate document research and development
21 data for iTunes overall. And in 2019, I also had information
22 that told me that the App Store accounted for roughly
23 two-thirds of the revenue for iTunes. So I used -- I used the
24 overall R&D dispendig (phonetic) ratio for iTunes as an
25 estimate of the R&D spending for the App Store.

1 Q. And having identified those numbers from the Apple
2 documents or made this estimate, what did you conclude that is
3 reflected here on slide 34?

4 A. That the R&D-to-sales ratio or R&D-to-spending ratio -- I
5 am sorry, that the R&D-to-sales ratio which is described here
6 as R&D as a percentage of total revenue is very low, and the
7 R&D-to-sales ratio is the common metric that economists use to
8 measure research intensity across businesses.

9 Q. What is your basis for saying that the R&D-to-sales ratio
10 for the App Store is very low?

11 A. Again, I compared the App Store to a benchmark group of
12 entities, the same group of entities we talked about before.

13 MR. BORNSTEIN: Gesundheit, Your Honor.

14 THE COURT: Sorry about that.

15 BY MR. BORNSTEIN

16 Q. You are saying you compared to a benchmark?

17 A. I compared to the five companies we talked about before.
18 As the benchmark for each of those companies, I determined the
19 R&D-to-sales ratio for those companies. I took the median of
20 those and I compared that to the App Store.

21 Q. And I'll do my effort not to say a number out loud here,
22 but the number in the bottom right corner, is that the extent
23 to which these other companies -- the multiple by which these
24 other companies have an RD-to-sales ratio compared to the App
25 Store?

1 **A.** Yeah, that is the multiple.

2 **Q.** Why does R&D expenditure and the RD-to-sales ratio matter
3 in assessing the competitive effects of Apple's conduct?

4 **A.** It doesn't have to, but it is an indicator of the extent
5 of effort that is going into -- into innovation and doing the
6 things we talked about before, coming up with new features for
7 the store, improving technologies and so forth. So it's an
8 important ingredient in leading to all those things.

9 **Q.** Speaking to all the things that flow from R&D, did you do
10 any work to assess the quality of App Store services?

11 **A.** I did.

12 **Q.** And let's focus on one issue that you've mentioned a few
13 times about what distribution platforms provide. Search and
14 discovery. Just to level set, why is search and discovery --
15 first of all, what is search and discovery in the context of
16 an online distribution platform?

17 **A.** So search and discovery is the core element of what any
18 store does, because ultimately consumers need to be able to
19 find things. So that is the core service that is being
20 provided.

21 For an online marketplace with lots of different things in
22 it, the search and discovery technology is what enables
23 consumers to find apps that they are interested in and it's
24 the technology that developers rely on to make sure that
25 consumers can find their apps.

1 Q. What did you conclude about the quality of App Store
2 search and discovery based on the evidence you reviewed?

3 A. Based on the evidence I reviewed, I concluded that there
4 were significant -- that developers perceived significant
5 problems with search and discovery in the App Store and that
6 that set of problems has persisted really for the past decade.

7 Q. Let's pull up slide 35, please. And I would ask you to
8 tell me, does this reflect some of the evidence that you
9 looked at on this point?

10 A. It does.

11 Q. What are we looking at here on slide 35?

12 A. We're looking at the results of a survey that Apple did in
13 2017 of developers to assess their views concerning the
14 performance of the App Store. And this particular slide
15 refers to their satisfaction with discoverability of apps,
16 which is a reflection of that search and discovery technology.

17 Q. What do the results of this survey conducted by Apple tell
18 you about the quality of search and discovery features, at
19 least in 2017?

20 A. So the bars show the percent that reported various levels
21 of satisfaction ranging from very dissatisfied to very
22 satisfied. And focusing on the right, a total of 36, it
23 actually gets rounded up into 37 based on the actual numbers,
24 but 36 percent, based on the bars here, indicated that they
25 are either somewhat or very satisfied. So figure roughly a

1 third of developers expressed the opinion that they are
2 satisfied, which means the others weren't.

3 Q. To be fair, the middle ground says what?

4 A. Says neither.

5 Q. Okay. And was this an anomaly, this May 2017 survey?

6 A. It was not.

7 Q. What other evidence did you see in terms of surveys of
8 developers and their satisfaction with search and discovery?

9 A. I looked at similar surveys in earlier years the surveys
10 and the results are recorded in my written direct testimony,
11 but I had similar surveys over the 2010s.

12 Q. And what does it tell you this level of dissatisfaction
13 continued for, as you said, over a decade?

14 A. Well, it's consistent with the R&D results in the sense
15 that it seems to be a reflection that the store isn't getting
16 better over time, there isn't investment taking place to deal
17 with -- with issues related to a core technology of the -- of
18 the store.

19 Q. Are there other pieces of evidence relating to search and
20 discovery that are in your written direct?

21 A. Yes, there are.

22 Q. Are there other pieces of evidence relating to other
23 quality metrics that appear in your written direct?

24 A. There are.

25 Q. What is all of this mean for consumers?

1 **A.** Well, consumers are on the other side. So if search and
2 discovery technology isn't working well, if there's problems
3 with that, it just makes it harder for consumers to find the
4 app that they want to meet the needs that they have.

5 **Q.** And based on the various pieces of evidence of quality
6 that you talked about today and in your written direct, what
7 did you conclude about how an innovative company like Apple
8 was behaving in its App Store business?

9 **A.** Well, it's surprising. Because, I mean, Apple is in, in
10 the hardware side, is a very innovative business. It was
11 surprising to see the App Store kind of languishing during
12 this period of time.

13 **Q.** Let me switch to a very different subject now, which is
14 payments.

15 **A.** Would it be possible, Your Honor, for me to take my, I
16 promise, my last drink of water?

17 **THE COURT:** Take as much as you need.

18 **MR. BORNSTEIN:** May I proceed, Your Honor?

19 **THE COURT:** Yes, of course.

20 **MR. BORNSTEIN:** Thank you.

21 **BY MR. BORNSTEIN:**

22 **Q.** So payments. Prior to this case, Dr. Evans, have you had
23 any experience with the payments industry?

24 **A.** Yes, I have.

25 **Q.** Can you explain what that prior experience is, please?

1 **A.** Yes. I've been conducting research, doing scholarly
2 writings, consulting in the payments industry since -- since
3 1991, 30 years.

4 **Q.** So let's focus on payments for online businesses.

5 What is, for an online business, a payment solution?

6 **A.** A payment solution for an online business is basically the
7 solution that goes from having a user interface that's
8 available to consumers to enter their card credentials as part
9 of the completion of order and buying process to not only
10 accepting those payment credentials but then ultimately being
11 able to get the money from the consumer and, in particular,
12 from the -- from the funding source for the payment credential
13 that is being presented, such as the bank that issued the
14 card.

15 **Q.** Is there a difference between a payment solution and a
16 payment processor?

17 **A.** Yes.

18 **Q.** What is the difference?

19 **A.** So a payment solution is all the things that go into
20 interacting with the consumer and interacting with the
21 whole -- whole process of trying to get conversions from
22 consumers for the developer.

23 Payment processing is a specialized business. So no
24 developer really has the skill set to actually authenticate
25 cards and go out and collect the money. That's the job of a

1 payment processor. So a developer would ordinarily hire one
2 or more payment processors to help them with that.

3 The payment processor authenticates the card and then it
4 knows how to actually go up the line, fetch the money, and
5 then ultimately put that money into the developer's bank
6 account.

7 **Q.** So focusing on that payment processing piece, do online
8 businesses typically work with just one payment processor?

9 **A.** Typically they work with several of them.

10 **Q.** What's the thinking -- what's the economic reason for
11 that?

12 **A.** One reason is, a lot of developers are selling
13 internationally and people use different payment methods in
14 different geographies.

15 You often need to hire multiple payment processors in
16 order to make sure you can cover all the possibilities for
17 customers that you want to interact with on a worldwide basis.

18 And the other reason is that the payment processors
19 specializing in different things. And there are reasons why
20 you might want to use particular payment processors just
21 because they do some things better than other payment
22 processors.

23 **Q.** Do payment processors compete with one another to win
24 business from developers?

25 **A.** Absolutely.

1 Q. Have you seen evidence of that kind of competition in this
2 case?

3 A. I did.

4 Q. And what are you thinking of?

5 A. So Epic has a payment solution for their game console and
6 PC business and for the Epic Games Store. And as part of that
7 payment solution, they have gone out and have solicited
8 bids -- solicited offers from payment processors.

9 Q. Take a look in your binder, if you would. There's a
10 document that is labeled PX2451. Do you see that?

11 MR. BORNSTEIN: This is in evidence already, Your
12 Honor.

13 THE WITNESS: Yes, I have it.

14 BY MR. BORNSTEIN:

15 Q. Okay. What is this document?

16 A. I just want to go through the rest of the document here.

17 MR. BORNSTEIN: We should probably take this document
18 off the screen. I believe it's subject to a sealing motion
19 that's pending from a third party.

20 MR. DOREN: I believe this exhibit is in evidence,
21 not for the truth of the matters asserted therein.

22 I think it was received for those purposes that be the
23 Court deems it ultimately to bear.

24 THE COURT: Did this come in, again, through
25 deposition testimony?

1 **MR. BORNSTEIN:** No. This came in through Mr. Ko who
2 testified last week.

3 **THE COURT:** 2451?

4 **MR. BORNSTEIN:** Yes, Your Honor.

5 **THE COURT:** I didn't have that one. Okay.

6 Ms. Stone, do you show 2451?

7 **THE CLERK:** That's the one the numbers got inverted.
8 It was on the 6th. It was admitted.

9 **THE COURT:** Oh I admitted it provisionally?

10 **MR. BORNSTEIN:** That's correct, Your Honor. The
11 provisional nature of your order related to the pending
12 sealing request from the third party.

13 **THE COURT:** Okay.

14 **BY MR. BORNSTEIN:**

15 **Q.** Dr. Evans, have you had a chance to take a look at the
16 document and tell us what it is?

17 **A.** Yes, I have.

18 **Q.** All right.

19 **A.** This is an email and attachment from PayPal that is
20 responding to the tender issued by Epic.

21 I should just say here that it's PayPal, but the part of
22 PayPal that is particularly relevant here is an entity known
23 as Braintree, which is a specialized payment processor.

24 **Q.** And this -- the attachment that you referred to is a
25 response from PayPal to Epic's request for a bid essentially;

1 is that right?

2 **A.** Yes.

3 We're -- where bid -- just bid a dollar amount, it's a
4 tender in the sense that Epic says, here are all of the things
5 that we're interested in a payment processor doing, tell us
6 how you can serve our business. Price is one aspect of that,
7 but it's actually many other things that are relevant for Epic
8 Games and that are being proposed by, in this case, PayPal.

9 **Q.** This document is dozens of pages reflecting the kinds of
10 things that PayPal believes it can offer; is that right?

11 **A.** That's right.

12 **Q.** Is that typical in terms of how payment processors compete
13 with lots of different vectors of competition?

14 **A.** Just to be clear on my knowledge, it is consistent with my
15 knowledge that payment processors compete for business
16 extensively in terms of visibility. And to this level of
17 detail in the tender process, I don't have that. But in terms
18 of my general knowledge that payment processors compete for
19 business from developers, absolutely.

20 **Q.** That's fair. I appreciate the clarification.

21 So let me ask the question: Do developers who offer iOS
22 apps have the same range of choices for payment solutions as,
23 for example, Epic does for its PC solution?

24 **A.** Yes, many do.

25 **Q.** For example, which ones?

1 **A.** So the developers that are selling physical apps -- I'm
2 sorry, the developers who have apps that are providing
3 physical services, Uber, for example, those apps have the
4 ability and do go out and develop their own payment solution
5 and hire their own payment processors.

6 **Q.** Are there some apps that are treated differently?

7 **A.** Yes.

8 **Q.** So let's take a look at slide 36, please, just to
9 illustrate the discussion we are about to have.

10 So what -- first of all, do you recognize the two app
11 icons on the top of slide 36?

12 **A.** I recognize Starbucks. Not until my team told me what the
13 icon was on the left that I know, but that is Tinder.

14 **Q.** No personal experience?

15 **A.** I have no personal experience.

16 I have lots of personal experience with Starbucks, not
17 Tinder.

18 **Q.** Tinder is a dating app, correct?

19 **A.** It is a dating app.

20 **Q.** The first line of this chart refers to the flexibility to
21 set price of products.

22 Why does Tinder have a X and Starbucks has a check?

23 **A.** Starbucks can do anything it wants with its app. It
24 doesn't have any restrictions. It goes out and gets its own
25 payment solution.

1 Tinder is subject to the IAP requirement and, therefore,
2 needs to go through a process that Apple has set up to use its
3 payment solution. And as part of that process, Apple has a
4 set of guidelines that basically requires that developers
5 basically fit their prices into a set of templates that Apple
6 has both for the U.S. but also internationally.

7 **Q.** The second line refers to the ability to select payment
8 processing services.

9 Again, why does Tinder have an X and Starbucks has a
10 check?

11 **A.** Starbucks can hire whoever it wants. Tinder has to use
12 the Apple payment solution to which the developer's connected
13 through IAP.

14 **Q.** And the last one here refers to the ability to provide
15 payment-related customer service.

16 Again, why does Tinder have an X but Starbucks has a
17 check?

18 **A.** Let's take Starbucks. If there are any issues with your
19 Starbucks mobile app in terms of upping the amount of money
20 you have in the app or having your order fulfilled or anything
21 like that, Starbucks is in full control of that relationship.
22 They can take care of you, its customer.

23 Tinder, on the other hand, has Apple basically standing in
24 the middle for the purposes of payments between it and its
25 customers. So if its customers have a problem with

1 subscriptions or anything else involving payments --

2 **THE COURT:** So is it -- what else is it other than
3 subscriptions?

4 **THE WITNESS:** In the case of Tinder, I believe it
5 is -- I believe it is almost entirely subscriptions. I don't
6 have a deep enough knowledge of Tinder to be sure that they
7 are on some other add-on features that Tinder has. But the
8 main thing that Tinder has is several subscription --

9 **THE COURT:** Can you buy the subscription on the web
10 and then still use the app?

11 **THE WITNESS:** In the -- in the case of -- in the case
12 of Tinder, I believe that's correct.

13 **THE COURT:** So you can?

14 **THE WITNESS:** Yes.

15 **THE COURT:** You can use the app without anybody
16 paying Apple anything if you subscribe somewhere else?

17 **THE WITNESS:** That's correct.

18 **THE COURT:** All right. Proceed.

19 **BY MR. BORNSTEIN:**

20 **Q.** So what do you understand the difference to be between why
21 Tinder is treated one way and Starbucks is treated another?

22 **A.** Ultimately because Apple has made the decision to do that.

23 **Q.** And the basis for that distinction in Apple's guidelines
24 is what?

25 **A.** Roughly speaking, apps that are providing digital content

1 within the app are required to use IAP for transactions
2 between the developer and its customers for the iOS app.

3 **Q.** In analyzing the effect of these restrictions, associated
4 IAP restrictions, did you again construct a but-for world?

5 **A.** I did.

6 **Q.** What was the but-for world that you assumed for your
7 analysis?

8 **A.** So just briefly, since I have gone over the other ones, in
9 this case I'm assuming that the App Store is the exclusive
10 distributor of iOS apps, and the only difference is that in
11 my but-for world, Apple cannot require developers to use IAP.

12 And just to be clear on that, I am assuming in my but-for
13 world that Apple is fully able to offer IAP and its payment
14 solution, it just can't require it.

15 **THE COURT:** So I don't understand. You just told me
16 that you can get the app off the web and still use the app on
17 the iOS system.

18 **THE WITNESS:** Yes.

19 **THE COURT:** So they are not requiring it.

20 **THE WITNESS:** They are -- so they are within the app.

21 So just to be clear on what IAP means -- means here, it's
22 a requirement with regard to transactions that take place
23 within the app. You are correct, Your Honor, that a user
24 could go to the web and subscribe to Tinder and then use the
25 Tinder app on their iPhone. But to the extent that a Tinder

1 user --

2 **THE COURT:** So how does that real world example that
3 you have on your own chart function in your theoretical world?

4 **THE WITNESS:** It functions in the theoretical world
5 in a couple of ways. So many people must take Tinder, just
6 stick with Tinder just to go through this concretely.

7 A user downloads the Tinder app on their smartphone, and
8 that is what most people -- most people do. Because most of
9 the use of Tinder is when people are out and about and they
10 are using it on their smartphone. So the Tinder app is on the
11 smartphone.

12 Then at that point, the Tinder user can sign up for
13 different tiers of subscriptions from Tinder that basically
14 range from different levels of dating services and related
15 things.

16 So the user can purchase those subscriptions within the
17 iOS app. And in those cases, when they make the decision to
18 purchase it within the iOS app, the developer's required to
19 use IAP and use Apple's payment solution.

20 Now, there is another possibility, which you've touched
21 on, which is the Tinder user could go to a website, pay for
22 the subscription on their PC, and then they would have the
23 subscription on their smartphone.

24 Here's where another problem comes in, though. Apple has
25 a number of anti- -- essentially anti-steering restrictions.

1 **THE COURT:** That's what I asked you about earlier but
2 you chose not to analyze that.

3 **THE WITNESS:** I chose not to analyze that separately,
4 but as part of the overall analysis that I've done.

5 So, for example, if Apple did not have those anti-steering
6 restrictions, then it would be possible for Tinder to message
7 the Tinder user and say, I have a great deal for you if you
8 just use -- go to the PC.

9 **THE COURT:** Right.

10 **THE WITNESS:** Apple prevents -- makes it very
11 difficult for that to happen and, therefore, the Tinder user
12 generally doesn't have enough -- wouldn't have enough
13 information to know that they could go somewhere else.

14 **THE COURT:** Unfortunately -- well, you can explain to
15 me, to the extent it exists, whether we've got good analysis
16 with respect to that issue. Because it is distinctly
17 different than this but-for world analysis here, right? Or
18 perhaps it is just a subset.

19 **THE WITNESS:** I do think it's a subset. So one
20 possibility, in terms of the but-for world, if I could, Your
21 Honor, just put this in sort of straight antitrust terms --

22 **MR. SWANSON:** Your Honor, can I object to this?
23 Because I don't think this has been disclosed. And if
24 Dr. Evans is going to talk about this, can we direct it to the
25 part of his report where he actually said this?

1 **THE COURT:** Well, did he, did you?

2 **THE WITNESS:** Yes. I discussed anti-steering
3 restrictions in the report.

4 **THE COURT:** Okay. We're getting to the end anyhow.
5 So why don't I just leave it at that.

6 Do you want to ask a wrap-up question and we'll continue
7 tomorrow?

8 **MR. BORNSTEIN:** Of course, Your Honor.

9 **BY MR. BORNSTEIN:**

10 **Q.** If I may, I have a follow-up question on the Court's
11 question about Tinder where I'm perhaps going to reveal the
12 fact that I've never used it myself, but there is testimony in
13 the record for Mr. Ong about how it works.

14 Let's suppose hypothetically that a Tinder user is able,
15 while out and about on his or her smartphone, to purchase
16 extra likes. So they find somebody attractive on the device
17 and they want to spend 99 cents or a dollar 99 so there is a
18 better chance that that person will see their profile.

19 Is that the kind of purchase that somebody could go make
20 on their PC back at home, or do they need to do it right then
21 and there on the app?

22 **A.** They need to do that right then and there on the app.

23 **THE COURT:** But does Tinder, and I haven't used
24 Tinder either, is it like *Fortnite* where they have an account
25 and like the V-Bucks, you have an account that you can draw on

1 so you don't have to do individual transactions? So perhaps
2 it was, you know, \$20 in your Tinder account that you could
3 have bought off the web that you can then apply \$2 for extra
4 likes?

5 **THE WITNESS:** So since I'm in the same position as
6 everyone else, my knowledge on the opportunities is what I
7 have discovered from going to the Tinder website where what I
8 see is several different tiers of subscriptions which provides
9 these likes.

10 So, in Mr. Bornstein's example, it would be upgrading to a
11 different tier of subscription that would give me more likes.
12 But I honestly don't know the answer to your question whether
13 there is something beyond the subscriptions that you could do
14 with the Tinder app. And my ability to investigate that is
15 hindered for various reasons.

16 **MR. BORNSTEIN:** My husband would be horrified that we
17 were having this conversation.

18 Your Honor, is this an appropriate place to stop?

19 **THE COURT:** It is.

20 So, Dr. Evans, we will resume again tomorrow. You may
21 step down for the evening.

22 **THE WITNESS:** Thank you, Your Honor.

23 **THE COURT:** Be back at 8:00. We will usually have
24 you back on the record at 8:15.

25 If I could just briefly have Ms. Lawyer, is she here? Is

1 she? Yes? And who do I have on the plaintiff's side so we
2 can go through these exhibits very quickly?

3 **MR. NIU:** Jin Niu will be representing Epic.

4 **THE COURT:** Okay.

5 Why don't you state your appearances.

6 **MR. NIU:** Good afternoon, your honor. Jin Niu for
7 Epic Games.

8 **THE COURT:** Good afternoon.

9 **MS. LAWYER:** Arpine Lawyer on behalf of Apple.

10 **THE COURT:** Good afternoon. Okay. So this is what I
11 show on my notes from Friday, May 7th. And these are in the
12 order of appearance, as you might see in a movie as opposed to
13 numerical.

14 335, 2235, 326, 4399, 442, 446, 2084, 2029, 372, 371, 364,
15 365, 2371, 315, 2469 which is also subject to sealing, or it
16 was then, 3399, the same, 5396, the same, 4638, 3993 subject
17 to sealing, 3681, 3783, and I also had 3642.

18 **MR. NIU:** Your Honor, we have 2783, I believe.

19 **THE COURT:** 2783?

20 **MR. NIU:** As opposed to 3783.

21 **THE COURT:** Yes. That's right, 2783. I misspoke.

22 Anything else, Mr. Niu?

23 **MR. NIU:** Can Your Honor repeat the last number,
24 please?

25 **THE COURT:** 3642.

1 How about you, Ms. Lawyer, do you have anything else?

2 **MS. LAWYER:** I don't believe Your Honor said 3955.

3 **THE COURT:** 3955.

4 Ms. Stone, do you have 3955?

5 Mr. Niu, how about you?

6 **MR. NIU:** I have 3955, but I actually do not have
7 3642.

8 **THE COURT:** 3642 may have been from another day. I
9 had -- I do have in evidence 3955.

10 Ms. Stone?

11 **THE CLERK:** Yes. I have it 3955, yes.

12 **MR. NIU:** If I can confirm 3642 is from a different
13 date.

14 **THE COURT:** Okay. So we are good on Friday? Do you
15 have something else?

16 **MS. LAWYER:** Yes, Your Honor. Instead of 3399, we
17 have 4399.

18 **THE CLERK:** She did say that. She said 4399. She
19 also said 3399. She said both those numbers.

20 **THE COURT:** I have both of them. One at the
21 beginning of the day, one towards the end.

22 **MR. NIU:** Epic has the same.

23 **THE COURT:** Okay. So both, Ms. Lawyer.

24 So for today then, we started off with 2435, 5441, 5539,
25 5544, 5540, 3233, 3457, 3222, 3254, 5542, 3933, 4177, 3641,

1 3297, 4167, 4138, 4652.

2 Anything, Ms. Lawyer?

3 **MS. LAWYER:** No, Your Honor.

4 **MR. NIU:** I may have misheard. Did Your Honor say
5 5541 or 5441?

6 **THE COURT:** I have 5441.

7 **MR. NIU:** Okay. I have 5541, but I can confirm that.

8 **MS. LAWYER:** Your Honor, I have that as well.

9 **THE COURT:** Which?

10 **MS. LAWYER:** 5541.

11 **THE COURT:** Okay.

12 Ms. Stone?

13 **MR. NIU:** I apologize --

14 **THE COURT:** Hold on.

15 **THE CLERK:** It was a video. 5541, a video.

16 **THE COURT:** Okay. 5541.

17 All right. Anything else?

18 **MR. NIU:** I apologize if your Honor has said these
19 numbers, but I have additionally 3069 --

20 **THE CLERK:** Speak into the mic.

21 **MR. NIU:** Additionally I have 3069, 3233, and 4072.

22 **THE COURT:** Hold on. You have what? 3069. Are you
23 sure it wasn't from before?

24 **MR. NIU:** Yes, my apologies. We said those were
25 already admitted.

1 The only one I have additionally is 3233.

2 **THE CLERK:** I have that. I had that one.

3 **THE COURT:** I have it in as well. I don't know if it
4 was from a different day, 3233.

5 **THE CLERK:** Yes.

6 **THE COURT:** I said that one.

7 **MR. NIU:** Okay, great.

8 **THE COURT:** Okay. Thank you.

9 **MR. NIU:** There's one more thing if we may raise with
10 Your Honor about the numbers.

11 We had -- the parties have met and conferred and talked
12 about a couple of amendments to prior numbers. In particular,
13 there were just like four corrections that we would like to
14 raise to the Court's attention.

15 **THE COURT:** Okay.

16 **MR. NIU:** One is Exhibit 2624, which was admitted on
17 Page 411 of the depo -- of the trial transcript. And that
18 number, we believe, was missing from the prior reconciliation
19 session.

20 **THE COURT:** Ms. Stone, do you have 2624?

21 **THE CLERK:** From Friday?

22 **MR. NIU:** This would have been from last week,
23 possibly Monday or Tuesday.

24 **THE CLERK:** I would have to look. I have four minute
25 sheets. 2624.

1 **MR. NIU:** It's on Page 411 of the trial transcript.

2 **THE CLERK:** Of the transcript, right?

3 **MR. NIU:** Yes, ma'am.

4 **THE CLERK:** I have it was admitted on the 4th. If
5 you look back on the minutes on page 2 and 3, Document 600, I
6 listed exhibits there.

7 **MR. NIU:** Okay. We just want to make sure it is
8 reflected on the record.

9 Additionally we have Exhibit 5505, which is also on the
10 same page, page 411. We believe that that was not read last
11 time. I just wanted to make sure the record reflects that
12 that document has been admitted into evidence.

13 **THE COURT:** Okay. Ms. Lawyer, you agree with both of
14 those?

15 **MS. LAWYER:** I do, Your Honor.

16 **MR. NIU:** I have two more. I apologize. One is
17 Exhibit 58 which we also show as having been admitted on page
18 838 of the transcript.

19 **THE COURT:** Do you agree?

20 **MS. LAWYER:** Yes, I do.

21 **THE COURT:** I show that one as well.

22 **THE CLERK:** So 58 --

23 **MR. NIU:** Yes, ma'am.

24 **THE COURT:** I showed 58.

25 **MR. NIU:** Lastly, Epic would like to note that for

1 the May 6 Bench Trial Minute, a document was written as 4373
2 which we believe is a typo for 4374 which was admitted that
3 day.

4 **THE COURT:** All right. So just for your own sake,
5 Ms. Stone, to the extent that it wasn't previously noted on
6 the minutes, I will admit 2624, 5505, 58, and 4374?

7 **MR. NIU:** Yes, Your Honor.

8 **THE COURT:** You agree with the last one, Ms. Lawyer?

9 **MS. LAWYER:** Yes, Your Honor.

10 **THE COURT:** Okay.

11 (Plaintiff's Exhibit 2624, 5505, 58, and 4374 received in
12 evidence)

13 **THE COURT:** And the 4374 was instead of?

14 I have that. So okay. Good enough.

15 Anything else?

16 **MR. NIU:** Nothing from Epic.

17 **MS. LAWYER:** Nothing from Apple.

18 **THE COURT:** Thank you very much.

19 **MR. NIU:** Thank you, Your Honor.

20 **MS. LAWYER:** Thank you, Your Honor.

21 **MS. FORREST:** Your Honor?

22 **THE COURT:** Ms. Forrest.

23 **MS. FORREST:** I have the binder that you'd requested
24 earlier today, the redline. I'll explain for one second the
25 color coding.

1 **THE COURT:** Okay.

2 **MS. FORREST:** Which is in black, what we did is we
3 put the entire thing in light blue. Then we released into
4 black things as they came into evidence. There's also
5 additional things that were unanticipated came in, we put them
6 into -- they are underlined in dark blue. And things that did
7 not come are struck out with red.

8 **THE COURT:** Okay.

9 **MS. FORREST:** We have a copy for Apple as well so
10 they can have exactly what the Court has and we will hand it
11 over.

12 **THE COURT:** Great. Thank you so much. My printer
13 cartridges are going low.

14 Anything else you want to handle right now? If not, we
15 will start again in the morning.

16 Mr. Bornstein?

17 **MR. BORNSTEIN:** I'm not aware of anything else right
18 now.

19 **THE COURT:** Apple side?

20 **MR. DOREN:** Nothing, Your Honor.

21 **THE COURT:** Everybody then have a good evening. We
22 will stand in recess until 8:00 a.m. tomorrow morning.

23 Thank you.

24 (Proceedings adjourned at 3:28 p.m.)
25

CERTIFICATE OF REPORTERS

We, Diane E. Skillman and Pamela Hebel, certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. We further certify that we are neither counsel for, related to, nor employed by any of the parties to the action in which this hearing was taken, and further that we are not financially nor otherwise interested in the outcome of the action.

_____/S/DIANE E. SKILLMAN_____

Diane E. Skillman, CSR, RPR, FCRR

_____/S/ PAMELA HEBEL_____

Pamela Hebel, CSR, RMR, FCRR

Tuesday, MAY 11, 2021